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APPENDIX TO THE
REPORT
OF THE
INDIAN FAMINE COMMISSION, 1898,
BEING
MINUTES OF EVIDENCE, ETC.

VOL. I.—BENGAL.



Presented to both Houses of Parliament by Command of Her Majesty.

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INDIAN FAMINE COMMISSION, 1898.

MINUTES OF EVIDENCE

TAKEN BEFORE

THE COMMISSION

APPOINTED TO FORMULATE FOR FUTURE GUIDANCE THE LESSONS WHICH THE FAMINE EXPERIENCE OF 1897 HAS TO TEACH.

At the Imperial Secretariat Building, Calcutta.

FIRST DAY.

Wednesday, 13th January 1898.

PRESENT:

SIR J. B. LYALL, G.C.I.E., K.C.S.I. (PRESIDENT).

SURGEON-COLONEL J. RICHARDSON.

MR. T. W. HOLDENNESS, C.S.I.

MR. T. HIGHAM, C.I.E.

RAI BAHADUR B. K. BOSE, C.I.E.

MR. H. J. McINTOSH, Secretary.

MR. J. E. O'CONNOR, C.I.E., Director General of Statistics, called in and examined.

(President).—You are, I believe, Director General of Statistics to the Government of India?—Yes.

You have held that office for two years?—Yes, but I have been doing the statistical work of the Government of India for twenty-two years.

I have been reading your very instructive Review of the Trade of India for 1896-97. I suppose that and the Note on the supply of food-grains contain nearly all the information on the subject of food-grains that you can give us?—Nearly all.

I suppose the Trade Review for 1897-98 will not be out till August? Will you be able to give us some more information in Simla?—Yes, I shall have the figures for the official year by the end of May, though not in full detail.

One has heard of such terms as rings or combinations among dealers to raise prices of certain articles beyond what may be called natural pitch by law of supply and demand. Do you think such a thing is to any degree possible as regards food-grains in India? No, these articles are dealt in by far too large a number of traders, and there is enormous and effective competition.

I suppose the grain trade is in the hands of Europeans? The export trade to non-Asiatic countries is mainly in the hands of Europeans, but the export trade is limited to wheat and rice. Excluding Burma, the export of rice is not very large, and wheat may be said to be the only grain exported in large quantity, and consequently I do not think that the export trade in food-grains has any material effect on the conditions of the country.

I imagine there was a good deal of jowar lately exported to Europe?—Jowar and bajra are used in Europe, I believe, chiefly as bird food, but the principal export is to the East Coast of Africa, Somaliland. It has been

increasing somewhat of late years, but the whole business is very small. From the figures in my Review, it appears that the export of jowar amounted to only 32,000 tons in 1896-97, and the trade was largest in 1892, when it amounted to 46,000 tons. Some pulse (dal) is also exported, chiefly to Europe.

As regards the rise of prices suddenly all over India, who does the thinking and gives the start to rise and fall? Is there a consultation among the numerous dealers?—I think the traders do the thinking for themselves when the weather reports show that the success or the failure of the harvest may be reckoned on as a practical certainty.

Do they follow each other like a flock of sheep?—The conditions are materially changed from what they were in the old days; the trader then dealt only in the local market, now he deals all over the country; a man in the Punjab with a man in Rajputana or in the North-Western Provinces, and so on.

To what extent can the dealer be relied upon to act reasonably?—I think the Indian trader in grain is just as reasonable as the European trader. I do not think prices were raised unreasonably in India. A European would have done the same thing, and probably in a greater degree. In fact the rise of prices in Europe when famine in this country was declared to be imminent was at least as sharp as it was in this country.

His primary object is to get as high prices as he can for his grain. Is it not possible that he may by delay in selling over-shoot himself?—The bunniah is sufficiently acute to know when to raise and when to lower his prices. He is not likely to delay reduction when the prospects of the next crop are assured. He always has in view the condition of the last harvest and the prospects of the next.

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19th Jan.
1898.

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In former times there were two things which might influence a bunniah—(1) the danger of riots, and (2) loss of market by a large part of the population dying off. Now with Government having adopted the attitude of binding itself to find money for the distressed part of the population, and also having bound itself to keep the peace, these risks must have been eliminated. Is there not a possible danger in the new conditions, and the bunniah may be tempted to keep up prices?—With the introduction of civilized conditions, namely, the protection of the man who supplies and of the person who consumes, you also necessarily introduce the factor of effective competition, and the bunniah also knows that, in existing conditions of communication, there is no difficulty in the transport of supplies from one place to another.

The grain dealers did show as great activity in moving grain as can be hoped for, did they not?—Yes, I think so, on the whole, as far as my observation went. I heard no complaints that traders were inactive in supplying local demands.

Was there great speculation in trade?—I do not know, and have not heard of any, but some of the representatives of the commercial houses could tell you.

In some former famines, there was a great deal of speculation, grain was stored in pits or godowns?—Probably; I have heard of none on this occasion, but I do not mean to say speculation did not take place; in fact I have no doubt it did.

There is an old argument against importation, that though Government can do more than any one trader, the trade, on the whole, can do a vast amount more than Government can do?—Yes, I think that is quite sound and accurate.

Do you think that if Government did intervene in a limited degree it is certain that such intervention would diminish the activity of private trade to a degree which would make the intervention of Government worse than useless?—I am afraid Government could not limit its intervention; if it began it would have to go on. If Government interfered, all business people would withdraw.

In 1873-74, when Government did intervene by importing, if I remember aright, private trade was said to be active?—I believe that private trade did nothing at all; as a matter of fact, the Government imported grain from Upper India, Burma, and all sorts of places, and did it in an extravagant way.

[Mr. Holderness remarked that the recent famine in Bengal had cost about one-sixth of the Behar famine of 1874.]

Government intervention no doubt was most expensive, but I think it was said at the same time that private

trade was active and did import a great deal more than Government?—My recollection is that the Government did practically everything, even to cart transport. I saw how the work was done in Calcutta, and there can be no doubt that the intervention of Government was a most colossal error. Government should give every possible facility for bringing grain to the places where it is wanted and leave private trade to do the rest.

In reply to a question by the President on the subject of bounties, the witness said,—If you offer a bounty on importation, everybody will be encouraged to enter the trade, and prices in countries of supply must inevitably rise with the increased demand. The result will be to enormously increase the cost of famine relief. Traders also will probably import grain in such quantities that they will overstock the market, their grain may be left on their hands, and there will be embarrassment, or failure may ensue. Any artificial stimulus of this kind is always overdone, and a reaction is inevitable.

I do not see why prices should be raised in foreign countries?—It is simply a question of supply and demand. The demand is largely increased, for every man will say to himself "I shall get at any rate the profit of the bounty, and Government will not leave me in the lurch." He will assume that Government, having encouraged him to import, will afterwards relieve him of his grain if it should happen to be left on his hands.

I am not sure that bounties are a failure: bounties have proved successful on certain products in Europe?—You are perhaps referring to sugar. If so, that is a debatable question, but people are, I think, beginning to find that the sugar bounties are not good in the end for the receivers or the country. The sound principle to keep in view in the matter of importation seems to me to be this: if there is a profit in the trade there is no occasion for a bounty, for trade will work efficiently on a profit. If the level of prices is not high enough for profit then the bounty is unnecessary, for other countries are worse off than ourselves and have evidently no grain to spare for us.

In reply to a question by the President on possible difficulties in creating a new trade in the importation of food-grains, the witness said,—I do not see why an obstacle should come in; such imports would be conducted like any other imports, such as coal, salt, or piece goods. There is nothing special in the business.

In the late famine, grain was imported from Burma and America?—Yes, and some was also brought from the Persian Gulf, whence there is ordinarily a small import trade in food-grains with Western India. The witness put in the subjoined table of the import and export of food-grains.

GRAIN AND PULSE.

Exported from British India by sea to other countries.

	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.
Gram Cwt.	308,990	327,744	344,652	633,199	274,954
Jowar and bajra "	902,368	752,745	814,269	731,669	652,812
Oats "	71,689	99,450	64,448	90,067	85,064
Pulse "	435,993	850,635	440,025	742,086	555,942
Rice in the husk "	542,812	627,983	580,063	516,162	454,016
" not in the husk "	27,395,513	24,019,924	33,721,528	34,635,624	27,820,322
Rice-flour "	2,678	10,320	2,759	456	708
Wheat "	14,973,453	12,156,551	6,867,791	10,002,912	1,910,553
Other sorts "	242,024	208,853	421,197	319,069	65,973
TOTAL	44,893,518	39,054,205	43,276,132	47,671,244	31,820,343

Imports into British India by sea from other countries.

	1894	1895	1896	1897
Gram Cwt.	1,807	3,265	354	1,894
Rice in the husk "	9,148	53,616	26,866	3,530
" not in the husk "	5,954	72,239	95,327	14,439
Wheat "	102,523	52,578	232,468	144,974
Pulse "	29,486	20,286	17,789	34,426
Other sorts "	152,206	127,291	99,561	95,470
TOTAL	301,124	329,278	472,365	294,833

Countries whence the imports of Grain and Pulse came into British India by sea.

	1895-96. Cwt.	1896-97. Cwt.	
United Kingdom	555	24,064	
Austria-Hungary . . . . .	...	493
Italy	111	54	
Portugal . . . . .	...	357
Abyssinia . . . . .	...	2,486
Eastern Coast of Africa. {	Mozambique	227	6,972
	Zanzibar	2,513	22,006
	Other ports	45
Egypt . . . . .	...	617
United States . . . . .	...	557,994
Aden	9	1,045	
Arabia	8,695	863	
Ceylon	1,840	1,476	
China—Hong-Kong	89	4,729	
Mekran and Sonmiani	6,920	805	
Persia	16,999	11,954	
Straits Settlements	11,077	29,186	
Turkey in Asia	243,430	396,727	
Australia	1,235	6,581	
Spain—Gibraltar	297	...	
South America	97	...	
Sam	750	...	
Other countries	39	8	
TOTAL	294,883	1,068,467	

The chief kinds imported were in 1896-97:—

From United Kingdom	Oats	10,001 cwt.
and other grains unspecified		11,820 "
From Zanzibar	Jowar and bajra	16,865 "
From United States	Wheat	488,634 "
and other sorts unspecified (mostly maize)		69,360 "
From Straits Settlements	Rice	25,350 "
From Turkey in Asia	Jowar and bajra	87,287 "
	Pulse	67,048 "
	wheat	103,019 "

Oats in small quantity were imported from the United Kingdom. I remember that the Indian brewers proposed to import barley, but found on calculation that it could not be economically done, high as were the prices of Indian barley.

(President).—I suppose the quantities of grain imported are larger than usual?—Much larger; the importations from the United States are entirely abnormal; we never had a pound before from the United States.

Mr. Holderness stated that the grain received from the United States, as a charitable gift, was sent to the Central Provinces.

(President).—These figures of grain exported from British India to other countries during 1895-96 and 1896-97 show that there was a very considerable export during these years?—The trade was chiefly in rice, of which there is always a great export from Burma.

Pulse and bajra I suppose went to the usual countries? Yes, wheat goes mainly to Europe, the largest proportion to England.

We have your permission to put these figures into your evidence?—Yes.

(Mr. Holderness).—Your Review deals with the year ending March last. I suppose your can give us the figures of exports up to 1st October 1896?—Yes. I propose in my next Review to compare the grain trade during the famine period (October 1896 to October 1897) with former periods. I shall be able, I hope, to let you have the figures for this period in May.

In regard to a bounty on import, if the bounty were offered by the Government of India, do you think it probable that the effect of such intelligence would be to raise prices in Europe?—I think so, necessarily.

Suppose the prices of grain did not go up and the effect of the bounty was to reduce prices in India would the result of such reduction be to give a well-to-do purchaser grain at a cheaper rate?—Yes, on the hypothesis, no doubt that would be the case.

Is one of the detriments to the bounty that very fact that it benefits persons who do not require assistance?—Quite so.

In answer to a question by the President: whether the increase of supplies following an importation stimulated by a bounty would not have the effect of making holders of grain in the districts lower their prices—the witness said—"It seems to me more likely that they would regulate their prices by the prices of the imported grain."

(Mr. Holderness).—You said you did not consider the bunniah had raised his prices in an unreasonable degree; had he raised his prices would there have been a sharp fall in September or October?—There must have been.

Was there such a fall?—No; prices are still comparatively high.

Why?—They are holding out now until the condition of the rabi crop is assured.

Gram has risen much more sharply than wheat?—Yes, it has risen from a lower depth to about an equal height.

If, during the famine, the prices of grains which are most dependent on the rainfall rose more sharply than prices of grains less dependent on the rainfall, would not the cause be the natural working of the law of supply and demand?—Yes, I should accept that inference without hesitation.

Is there any evidence that a permanent rise in the price of food-grains in India has taken place of late years?—Yes, the tables of prices show that there has been a distinct and considerable rise since about 1885; before that year there was no material increase in prices.

If such a rise has occurred, do you think that it is in any way connected with the fall in the Indian exchange?—That question was discussed when Lord Herschell's Committee on the Indian Currency was appointed in 1892, and the Government of India then said that—

"Although there must be a connection between the range of prices and the standard of value, it is in practice extremely difficult, if not impossible, to trace the connection. The extent to which fluctuations of price are due on the one hand to causes primarily affecting the standard of value, and on the other to such causes as the failure of crops or the apprehension of scarcity, can never be determined with accuracy."

I accept that conclusion, and should not be prepared to discuss the point. I may say that while the currency factor is obscure there are other factors which are clearly visible.

Are the fluctuations due to the fall in exchange?—I do not believe that a fall in exchange has the effect of raising prices, but in any case a fall in exchange would directly affect only those grains which are exported, namely, rice and wheat, and the Indian grain market is not appreciably affected by the export of rice and wheat.

Is the export of food-grains from India in a series of years on such a scale as to materially affect the ability of the country to feed the population, or to materially reduce the reserve stocks held at a particular point of time in the country?—Not in the slightest degree; on the contrary, I think the export trade is a distinct advantage.

By increasing the area of cultivation?—Yes.

The effect of this export trade is to increase the people's reserve of food?—Yes.

Have you any idea of the total production?—I have not attempted to work it out. In the case of wheat, I

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know that the quantity exported represents not more than one-tenth of the production. In the case of rice, taking India, exclusive of Burma, the proportion of the production which is exported is extremely small, though in Burma rice is grown extensively for export.

Why should not the average export be a fair guide to ascertain the surplus food-supply?—You might do it that way, but you must first know the production.

The export is so very much less than the production that you think there is no appreciable drain from India?—None.

Do you think maize might have been imported at a profit?—In a note I wrote in the beginning of the famine I pointed out that wheat was not the food of the distressed classes, but that maize was a commoner and cheaper food, and that the quantity obtainable from the United States was very large.

Taking the relative values of maize in America and in India, was there a margin for profit?—Yes; the price in Bengal towards the end of 1896 was Rs 4-6-9 per cwt., and the equivalent of Rs 1-5-3 in New York.

What do you think it should have been landed at?—Add 10 per cent. to the price for freight and other charges. It could have been imported under Rs 2?—Probably.

There was only a very little maize imported. Why?—I cannot explain why more than 5,000 tons were not imported from the United States. It may be that in many of the tracts where famine raged, maize was not well known to the people as a common food; perhaps in the Bombay and Madras Deccan and in the Central Provinces they do not know much about maize as a common food.

(*Mr. Dose*).—It is immensely liked in the Central Provinces?—Then I cannot explain it. It may be that the trade had a closer and adequate source of supply in rice from Burma, and did not care to go so far afield as the United States for another grain.

Did you recommend that Government should import maize?—Certainly not; I recommended that they should inform the trade that maize was a cheap and useful food, and that the available supply in the United States was very large. I do not know whether the suggestion was adopted.

You would not have gone further than that?—No, I would certainly not have recommended that Government should import maize. If they had done so, the importers of all grain would have ceased to operate, for they would have inferred that if Government were importing one grain to-day they might be importing another to-morrow.

In reply to a question on Burma exportations of rice the witness said.—The export of rice from Burma to India was 363,000 tons from November 1896 to the end of October 1897.

What does that represent of the Burma rice surplus export?—The average quantity exported from Burma to foreign countries is one million tons.

This import into India was rather over one-third and considerably less than the exportable surplus of the year?—Yes.

This import of rice into India was exceptional?—Yes, exceptionally large, although the import of rice into India has been increasing during the last five or six years. It is imported for consumption as food, not for any other purpose.

Do you happen to know into what districts this Burma rice goes?—I do not know.

You have not heard if the extension of the jute industry has interfered with the increase of rice cultivation?—I do not think that there has been any appreciable degree of interference by jute with rice.

From what month did this large importation commence?—From November 1896.

Was the result of this large importation to reduce prices in India?—There was a reduction of prices in Bengal immediately following on the harvesting of the winter rice crop in Bengal and the introduction of the new rice into the market. I do not think the importation of Burma rice had any particular effect in bringing down the prices, though it probably prevented them from rising much higher.

How is this Burma rice trade managed, by natives or Europeans?—All the local grain trade is in the hands of natives in Calcutta. I believe the native firms in Calcutta imported from Burma on their own account.

They merely used the transport agencies of European firms?—Yes.

When Burma rice came was there any difficulty in taking it up-country?—None. I understood that there was some little reluctance at first to take the rice in the consuming districts, but that difficulty must have been soon removed, for once the import from Burma really began, it went on without interruption.

Have you any information as to where it went?—No; you might get that from the importers themselves, but I think that even the East Indian Railway could not tell you accurately the origin of the rice they carried, Calcutta being a very large depot for Bengal rice. All the work connected with the distribution in the interior of the country of all imported goods is done by natives. European firms have no distributing agencies.

Suppose the Burma rice failed and we were in the face of great scarcity in India which could only be met by importing grain from Europe or America, would the trade rise to the emergency?—Yes, at once. There are no difficulties in the way. The European firm would at once telegraph to New York or Liverpool, ascertain prices, calculate at what price the grain would be landed here, and then make his contract with the native dealers.

Would he consider it risky? This is the ordinary course of business with all imported merchandises. The merchant does it every day of his life.

(*President*).—You said that the effect of an export trade is not to diminish the average stock of food-grains for consumption by the masses in India, but to increase it by stimulating production; is this really the case in India?—Don't you think the Indian cultivator will go on cultivating as much as he can without much reference to prices. He has nothing else to do and can always get some profit?—Ordinarily he has got the choice of the article he will cultivate; we always find him changing his cultivation according to the market demand. In the matter of wheat they will grow more because it is more profitable for them.

(*Mr. Holderness*).—I suppose railways are one of the causes which have stimulated the wheat trade?—Railways and the Suez Canal. Railways have caused new land to be broken up for wheat where it did not exist before.

Have railways opened up land-locked tracts?—They have done so in various places. The special instances of Bilaspur and Raipur may be mentioned; those districts were land-locked tracts in the Central Provinces growing rice and wheat much in excess, in good years, of the local demand with the consequence that occasionally rates as low as 6 and 80 seers to the rupee are recorded. On the other hand in bad years prices rose swiftly to a very high level. As soon as the railway was extended to these tracts the great differences in the level of prices between them and adjacent tracts which were open to external markets, ceased to exist, that is, the level of prices rose permanently to the level existing in other places, because then an external demand arose for as much grain as was produced.

Looking to the total exports and to the utility of distribution which railways give, would you say that railways have offered more benefits in the matter of food-grains than the occasional drawbacks?—Certainly.

Would the increase of communication and the opening of markets tend to prevent the storage of large quantities?—That would probably be the tendency, but the people are very conservative in their habits.

If the ultimate effect of this modern system is to decrease the storage, does it make the situation of the Government of India more difficult?—No.

Why?—Why should it, where does the grain go? It is eaten by the people or they are paid for it.

The assumption is that in the old days there was a storage of nine months' supply in pits, now this is given up and the people feed themselves from day to day?—I do not know that the assumption is correct and I do not think that the conclusion is correct.

I think you said the practice was being abandoned?—I have said that things may be tending to a decline in the habit, but I have no information on the point. At the present moment it would seem that they still store, for I find that in all provinces since the beginning of last year the areas under non-food crops have been contracted, because the people wanted to place as large an area as possible under food-grains in order to replenish their exhausted stocks.

Have you seen the estimate given in the Famine Commission's report as to the cost of store reserves of grain in India?—I do not remember that.

What do you think of that project?—What? to establish public granaries in view to a time of dearth? Go back to the practice of the Pharaohs of Egypt? I think it would be an excellent arrangement for thieves and rats.

You said the prices of food-grains had risen during the last 10 years, has there been any corresponding rise in wages?—There has been a more or less corresponding rise in the wages of skilled labour. The wages of unskilled labour have similarly risen in most places, but in some provinces the records are obscured as regards agricultural labour by the practice of making payments to some extent in kind (cloth or grain).

Is there no information as to the wage of unskilled digging labour employed by the Public Works Department?—All wages of that kind have risen.

Has the increase been in the same proportion as in grain?—Much the same, a general rise of from 20 to 25 per cent.

The purchasing power of the people has not diminished?—I do not think it has; in fact, I think their purchasing power is in many respects greater, for they are able to buy various comforts and small luxuries which formerly were inaccessible to them. An illustration occurs to me at the moment in matches and kerosine oil.

Have the wages of the better class of artizans, such as weavers, been reduced?—I have no record of the wages of weavers, and I know of none.

Have you any information as to the condition of that class?—Much has been written of their poverty, yet I see a large increase in the production of yarn intended for hand weaving, and that is not consistent with a decline in the number and condition of the hand-loom weavers. Certain classes of weavers have no doubt been impoverished, those who wove the higher classes of goods, such as muslins, which have not been able to compete with imported goods of the same descriptions, but the weavers of coarse yarns are probably quite as well off as ever they were.

Is there a good market for country fabrics?—There must be, having regard to the quantity of yarn which is spun in the mills and which is spun for manufacture in hand-looms of the country.

Is it all coarse yarn?—Most of the yarn spun in India is of the coarser descriptions.

Have openings been found for the weavers in the mills?—In weaving mills must have employed numbers of persons who were hand-loom weavers.

Would a weaver by caste go into a cotton mill where reaving is not done?—I do not know why he should not, just as an agriculturist would.

It is a sedentary trade?—The man has to stand at the spinning frame.

Has the indigenous hand spinning industry been injured?—I do not know, but I think it was any class of hand spinning industry.

factory. We do not even know accurately the area of production of food-grains. I think the estimates in Bengal are extremely defective; then we do not know the areas in the Native States; in the Madras Presidency we have no information as regards large tracts, in fact our information is fragmentary.

Speaking generally, is it not the practice for the cultivator, where he can afford it, to keep back out of his year's produce enough for seed and for subsistence for himself and his family till the next harvest and only dispose of the excess if any? Ordinarily, the man does as you suggest.

The fall in the value of silver did not put any obstacle in the way of people selling their silver?—No, of course they did not get the same price for it as they would have done if silver had not fallen. I discussed this subject at pages 75-77 of my review of the trade of 1896-97, being led thereto by certain remarks which were made in newspapers in England and America. The inference I drew was that if the people had sold their ornaments they must have done so on a very small scale.

While the high prices prevailed, did those cultivators who had grain to sell to dealers get prices as proportionately higher than usual as those the grain dealers were getting?—I could not answer that directly; I should say the Indian cultivator is very much alive to his own interest.

Were the wholesale dealings between grain dealers at prices as near to retail prices as they usually are?—That is also a question I cannot answer, because unfortunately it is only very recently that we have had a record of wholesale prices; it has been going on for one year only.

(Mr. Holderness).—I may mention that I see in the North-Western Provinces local Gazette that the wholesale prices are given as well as the retail?—That is done in accordance with the new arrangement to which I have just referred.

I compared the prices for certain periods of the famine and cannot find any difference between the two?—There must be something wrong then. I have not yet tested the figures, but I will look into them.

(Mr. Bose).—You are distinctly of opinion that the grain dealers in the mofussil were in no way responsible for the rise in prices during the late famine?—Not in the slightest degree; they simply acted as human beings engaged in trade would have acted everywhere.

In reply to a question by Dr. Richardson, the witness said, it had been a subject of remark for the last twelve months that the people showed a very singular power of resistance on this occasion, more so than formerly.

(Dr. Richardson).—Yes, in what way?—In every way. The activity in the export trade, the quantities of gold and silver imported, are extraordinary at a time when famine was raging.

Did they sell jewellery as much as formerly?—They sold their brass and copper pots formerly, but not their jewellery.

(Mr. R...)

Mr. J. E. O'Conor.

19th Jan. 1898.

Mr. J. E. O'Connor. In reply to a question from the President the witness handed in a statement containing the figures of export of rice from Burma.

19th Jan.
1898.

Exports of Rice husked and unhusked from Burma—in cwt.

To	1893-94.	1894-95.	1895-96.	1896-97.
Bengal	1,654,734	761,140	23,635	3,132,040
Madras	3,675,055	1,962,887	993,748	794,531
Bombay	1,478,061	2,072,690	1,447,459	2,692,959
Sind . . . . .	...	...	8	...
Total to British India	6,807,850	4,796,707	2,464,848	6,529,530
Pondicherry	31	4	28	...
Travancore	202,520	216,701	152,575	70,824
Cochin . . . . .	...	372,233	21,267	...
Total to Indian Ports not British	202,551	588,938	176,870	70,824
Total to India	7,010,401	5,385,645	2,641,718	6,600,354
To FOREIGN COUNTRIES—				
United Kingdom	4,223,277	3,508,142	4,292,222	3,230,000
Austria-Hungary . . . . .	...	80,000	...	...
Belgium . . . . .	...	4,911	...	...
France	54,059	54,297	100,439	9,998
Germany	247,240	262,266	465,915	163,178
Holland . . . . .	...	83,999	...	...
Italy . . . . .	...	...	...	10,616
Malta	292,950	540,468	...	...
Eastern Coast of Africa . . . . .	...	...	...	27,77
Egypt	5,517,892	10,138,241	10,766,703	10,038,57.
Mauritius	3,618	14,079	32,922	25,495
Natal	4	...	...	...
... . . . .	...	...	30,450	14,269
... . . . .	...	51,386	...	...
... . . . .	...	82,500	...	...

knows more about the matter than you do.

Mr. Holderness handed the witness a copy of his Famine Narrative Report, and asked him how far he accepted paragraph 24 f.—You leave out the Native States.

How far do you accept the general suggestion?—I think you have not made sufficient allowance for intensity of cultivation. I may say I have been led to the conclusion that Bengal is outrunning its supply of rice by increase of population, thus accounting for the increasing import of Burma rice.

There is a net export of food from Bengal, is there not?—I don't know, I am inclined to think there is not.

Is there a complete registration?—There is a registration on the frontier, but it is very imperfect. You have districts which are situated on the borders of other provinces, admirably adapted for the purpose of sending rice next door, while the Province as a whole may require all or more than it produces. As regards this particular paragraph (24), I would not be able to contest it. I think it is an inference that is reasonable enough, though the argument is full of assumptions.

Mr. Holderness remarked, with reference to the growing density of population, that there was an increase of population and an increase of prices of food-grains, and if anything, a diminished export of food-grains, and these things seemed to show that the population was increasing faster than the food-supplies.

I do not attach any particular importance to that, the same thing has happened in the United Kingdom.

Therefore the failure of rains and bad harvests affects the country more acutely than it did when the margin was larger? No, the difficulty was formerly to get the grain from where it was abundant to where it was not so. This difficulty has ceased to exist, and distribution is easy. At the same time I confess that I think the time has arrived to devote a smaller degree of attention and money to the construction of railways, and more attention and money to the provision of irrigation; smaller attention to distribution and more attention to production.

In the poorer tracts have the railways and roads excluded into them, had the effect of stimulating the export the annual surplus production to seaports and to rich tracts where more valuable crops are produced? Yes.

When crops fail and prices go up in such tracts, is private ready to import freely into them?—Certainly.

If they have parted with all their grain and have the means to buy imported grain what are they to do?—They were paid for the grain they sold, and they ought to have a reserve in cash instead of in grain. Trade would then do the work. If the people were so poor that

they could not pay for food they must of course go on to relief-works.

In reply to a question from the President, the witness stated that 7,263,859 cwt. of rice were imported from Burma into Beagal in the period from November 1896 to October 1897. He also put in the subjoined statement of the wholesale prices of rice during the same period at Rangoon and Calcutta:—

	Per cwt. Rangoon.	Per cwt. Calcutta.
	R s. p.	R s. p.
November 1896	5 2 8	7 0 0
December "	4 0 3	7 0 5
January 1897	4 0 4	5 15 1
February "	4 0 3	5 12 3
March "	4 1 3	5 15 10
April "	4 3 0	6 4 5
May "	4 13 5	6 10 2
June "	5 1 3	6 13 7
July "	5 0 6	6 14 0
August "	5 2 11	7 6 10
September "	4 10 11	8 3 1
October "	3 12 5	7 4 3

(Mr. Holderness).—I suppose there never was any but a momentary fall in the importation of rice from Burma?—No, when the fall occurred Burma prices were slightly affected, but a margin always existed between prices in Rangoon and in Calcutta, sufficient to admit of the continuance of the trade.

Can you say anything about the reduction of railway rates?—I cannot answer that, I have no specific information. I would suggest your asking Mr. Dring, the General Traffic Manager of the East Indian Railway.

(President).—In August and September prices were high in Calcutta, were they not?—Yes, doubtless people were waiting to see how the harvest would turn out, those being the critical months.

Lately there has been a very considerable demand outside of India?—Nothing very unusual.

(Mr. Holderness).—Was there a large demand for seed-rice in Bengal?—Yes, no doubt.

And the Burma rice would not have answered that purpose?—No.

Therefore the importation of Burma rice into Calcutta and thence into Bengal may have been due to the high prices of seed-grain?—Perhaps so, but I cannot say.

MR. ROBERT STEEL, C.S.I., late President, Bengal Chamber of Commerce, called in and examined.

(President).—You were formerly President of the Bengal Chamber of Commerce?—Yes.

What can you tell us about the trade in rice between India and Burma during the recent scarcity?—The trade in rice during the recent scarcity between Burma and Calcutta was carried on by European houses. The principal importers were the Arracan Company, a Trading Company having establishments at the several Burmese ports, also in London and Calcutta. The trade was doubtless initiated by the Arracan Company who commenced shipping rice in quantity to Calcutta from Rangoon. Their manner of conducting the business would be to begin selling to Calcutta dealers as soon as they had secured the grain, and as they cleared their hands of one shipment they would arrange for further imports. This is the usual way in which merchants conduct their business. I have no knowledge whether the operations proved profitable or otherwise, but expect they were moderately so.

What do you think would be the result if the Government gave a bounty upon the import of any particular grain?—The effect would probably be to stimulate the imports of grain, but it would have the effect of raising prices at the shipping ports, and would, in my opinion, be an expensive way of obtaining supplies.

If in consequence of a bounty being offered large European firms took to importing grain, by what agency would the distribution in India of that grain be effected?—

The European importers would sell the grain to native dealers at the best prices they could get.

Did you observe at any time during the late famine, any great difference between prices in the distressed districts and those prevailing in Calcutta?—I believe there was no very marked difference at any time.

Was private trade able to do all that was required in order to keep the distressed districts supplied?—I believe that trade would adapt itself to the requirements of the situation.

Was there much speculation in time bargaining at the time when famine was apprehended?—Not to my knowledge.

It was remarked by Mr. O'Connor a short while ago, in speaking of imports of maize from America for famine relief, that maize was to be got much cheaper than wheat in America. Yet almost no maize was imported from America. Can you suggest any reason for this?—I have no special knowledge of the relative prices of wheat and maize in America and Black Sea ports at the time of the scarcity. Much would depend on this. There are several different kinds of maize. Possibly some of these might not suit the taste of the natives, and in any case importers might not know that maize was as saleable as wheat. I think it likely that maize was not so much cheaper than wheat as in former years.

(Mr. Holderness).—Do you think on the whole that the Government policy of abstention from interference in

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Mr. Robert Steel.

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trade was the right one?—In my opinion the policy of Government was absolutely right. The object in view was the most effective relief to the people at a minimum of cost to the State. I think the system of providing money for relief works, and leaving trade to furnish the grain was the most effective and the most economical which could have been adopted.

At one time the Government was asked to stop the export of grain from India. Do you think that the Government was right in refusing to do so?—I think it would have been a fatal mistake to have prohibited the export of grain, and will give my reasons. In a country like India dependent for its food-supply upon the rainfall, every means should be adopted to stimulate the production of a larger supply than may be wanted in an ordinary year. There will then be a greater supply to fall back upon in case of deficient rain, and the advance of prices will keep the grain in the country. To induce cultivators to grow more grain than they expect will be required by the country, it is essential to cultivate an export trade.

If the Government had thought that a case of interference had been made out, in what manner could Government have best interfered?—I know of no method of interference which would not do more harm than good.

Would a bounty have had any effect upon the grain market in India?—I think it would have had an effect in attracting grain, but, as previously explained, I think it would have caused such a rise in prices in foreign markets as would make the plan an expensive and wasteful method of increasing supplies.

Do you think that any kind of ring or combination to keep prices higher than what may be called the natural pitch of food-grain prices was formed, or that such a ring or combination is possible in India?—No. I do not think that any ring could exercise much influence on the prices of grain in India. It would be too large an undertaking, and competition would keep prices at about their legitimate level.

(*President*).—If it was possible, would there be danger in the mere fact of Government making known its intention to keep the people alive at whatever cost grain could be obtained?—I do not think that any announcement of the kind would affect the situation. It is well known that it is the declared policy of the Government to prevent loss of life from famine.

(*Mr. Holderness*).—If the Government adopts the policy of keeping the people alive by giving them cash, while avoiding any interference with the grain trade, would not this enable the grain dealers to keep prices artificially high?—I do not think so.

Do you remember the Bengal famine of 1874?—I do.

Do you think that the Government were in that case ill-advised in importing grain?—I think the policy then adopted caused a great deal of waste and needless expenditure.

Do you think their preparations were excessive?—As things turned out, I believe more grain was imported than was required, and there was consequent waste.

Would such preparations always tend to be excessive?—I think that any interference by Government with private trade must throw the whole weight upon Government alone. No trade can compete with the public purse. The responsibility thrown upon the central and local authorities would be enormous. The tendency would be to over-estimate requirements and great waste must ensue.

Is this one of the dangers attendant on the Government undertaking to import food?—Certainly.

Would private trade be paralysed?—I think absolutely so.

Was it so paralysed in 1874-75?—It was.

Suppose Government undertook to import grain for the support of persons on relief in the distressed tracts, giving an assurance of leaving the general market untouched, what would the trade think? Would they rely on such an assurance?—I cannot see any advantage in such an operation and such a declaration. I do not think that under such conditions private traders would consider it safe to compete with Government.

Do you then consider that even such limited importation by Government would lead to the stoppage of private trade?—I do.

In that case might the Government have to go further than it originally contemplated?—I believe so.

What do you think of the suggestion that the Government should prohibit the export of grain in a famine year?—I have given my opinion in reply to a former question.

What do you think of the view that the grain export from India ought to be entirely and continuously prohibited?—I would entirely disapprove of such prohibition for reasons already given.

Do exports thus indirectly increase the available surplus of food-stocks?—Undoubtedly.

Is it the case that in Bengal the cultivation of certain grains for export has taken the place of the cultivation of the ordinary food-grains of the people?—It is not the case.

Assuming that there is no culturable waste land, how could the cultivation of grain for export be extended except by substituting such crops for others?—If it be the fact that there is no culturable waste land the answer is obvious, but I believe there is plenty of culturable waste land in India.

Is there a point at which exports would automatically contract?—Certainly. Exports would contract as prices rise. The countries which usually import food from India would obtain it elsewhere.

Supposing in the late famine that India had not had Burma to fall back upon, do you think that the trade would have been equal to importing food from America?—I have no doubt that it would.

Would this have taken a certain amount of time?—The trade would have to be organized, but this would be rapidly accomplished. In about sixty days grain could be brought here from America or the Black Sea.

Compared with the ordinary export trade in grain would such import of grain be less profitable and more risky?—It need not be less profitable. There might be a certain amount of risk about it until the trade was thoroughly organized. There might be some danger that the dealers to whom importers would sell the grain might not be altogether trustworthy and might be unable to fulfil their contracts.

In the case of Burma, is there the same difficulty?—The same difficulty would arise, but in less degree as the shorter time required for importation would reduce the risk I have explained.

The difficulty may be a considerable one at first?—I do not think the difficulty insuperable.

If instead of the late monsoon being favourable it suddenly stopped in September, would food-grain stocks in India have then been very low and food almost unobtainable?—Even in that case I think food could have been obtainable at a price. There will always be a certain amount stocked in the country. The well-to-do classes always keep a stock of rice in their houses.

Would the trade have ventured to import from distant countries, however high Indian prices might be, so long as there was a chance of the monsoon reviving?—I think that as soon as prices showed a profit on importing, merchants would begin to import.

Is there usually a certain quantity of grain afloat in ocean-going ships which may be diverted to any port?—There is always a certain amount of grain afloat to Europe, and cargoes might be diverted to India if prices admitted of this being done profitably.

Would tightness of the money market in India seriously hamper an import trade in grain from distant ports, or prevent it from being organized, other conditions being favourable?—I do not think tightness of money would prevent imports. The cost of interest on goods in transit would form an item in calculations as to the profitable nature of the operation.

This year, if there had been an opening for a profitable import trade in grain from America, would the dearth of money have been an obstacle?—I think not as an obstacle to be seriously considered.

Is the grain trade of Calcutta practically in European hands?—The export of grain and the import of grain in time of scarcity are in European hands. The collecting of grain for export and the distribution of imports are chiefly in the hands of native dealers.

Are the exports of food-grains, so far as Calcutta is concerned, chiefly confined to fine rice?—Chiefly table rice, but there is some rice exported to Ceylon, Mauritius and the West Indies for the use chiefly of Indian coolies.

Do you think that within the last ten or twelve years there has been a permanent rise in the price of food-grains?

—There has been a gradual rise in all prices during the decline in the value of the rupee compared with gold. A corresponding advance in the value of the rupee will cause a general decline in prices.

Is there a duty upon rice leaving Burma and India?—Yes, the duty is 8 annas per maund, say £6 per ton, equal to 6 per cent. on the value of common rice.

Is not the duty upon Burma rice justified on the theory that Burma has a monopoly of this trade?—I think not. As a matter of fact Burma and Bengal have no monopoly. Rice is exported from Cochin China, from Siam and from Japan in increasing quantities. Besides, cheap rice comes into competition with potatoes, maize and other farinaceous substances for sizing and distilling purposes.

(*President*).—I imagine that in China, Siam and Japan there is an export duty upon rice? I cannot say, but the Commissioners can obtain this information from others. I am under the impression that there are no export duties in those countries.

(*Mr. Holderness*).—Is it not the case that under present conditions there is a good demand for Burma rice? If this be so, how would the abolition of the duty stimulate production?—The abolition of the export duty on rice would make it more profitable to grow rice, and would therefore stimulate the production of the grain. I think the Commissioners might consider whether they should not recommend Government to abolish the export duty on rice as soon as financial exigencies permit. Anything that stimulates the production of grain is an additional security against famine.

Do you think it is the case that the cultivation of certain food-grains for export has reduced the area under the commoner grains consumed in India?—I cannot express an opinion on this point.

Is jute grown upon the same class of land as rice?—*Mr. Robert Steel*. It is so in the neighbourhood of Calcutta. In Eastern Bengal, where the bulk of the jute crop is grown, part of the lands are more suitable for jute, other parts more favourable for rice, and much of the land would suit either crop. 19th Jan. 1898.

Is it a correct statement that the population has increased faster than the food production?—I think production has kept pace with the increase in population.

You look upon the people of Eastern Bengal as generally well-to-do?—The most prosperous peasantry I know of.

In spite of the increase of exports?—Yes.

The Bengal Government lay great stress upon the extreme poverty of the Behar ryots. In such comparisons may it not be the case that the flourishing condition of the people in the rest of the Province is taken as a standard of comparison?—That particular district is congested and in that respect contrasts with Eastern Bengal. I do not know how far the difference affects the views of the Bengal Government.

Has the importation of foreign goods injured any of the indigenous industries of India, and thereby depressed certain classes of the population?—It may have caused a decline in certain industries, and driven the workers to other occupations. The establishment of Jute Mills and Cotton Mills has provided very remunerative labour for many whose own original industries have declined. The condition of the peasantry and labouring classes has greatly improved in recent years.

Have you in your mind any practical suggestions to offer for preventing or mitigating future famines?—The abolition of the export duty on rice is the practical step which I recommend.

At the Imperial Secretariat Building, Calcutta.

SECOND DAY.

Thursday, 20th January 1898.

PRESENT :

SIR J. B. LYALL, G.C.I.E., K.C.S.I. (PRESIDENT).

SURGEON-COLONEL J. RICHARDSON.
MR. T. W. HOLDERNES, C.S.I.

MR. T. HIGHAM, C.I.E.

RAI BAHADUR B. K. BOSE, C.I.E.

MR. H. J. McINTOSH, *Secretary*.

Mr. A. S. GLADSTONE, of Messrs. Gillanders Arbuthnot & Co., called in and examined.

(*President*).—Have you had long experience in India?—I first came out in 1882.

Have you any special knowledge of the grain trade?—Not beyond the usual general knowledge that one acquires in a general merchants' business in Calcutta.

How far and in what ways was the export by sea of the various food-grains affected by the famine and scarcity?—I have no exact figures on the subject, but the export of rice undoubtedly fell off very largely. I think that the average exports of rice for 15 years back were about 400,000 tons, while last year they were about 155,000 tons only, of which about 44,000 went to Bombay, Coimbe and the Coast ports of India.

How far and in what ways was the export by sea of other commodities affected?—I am sorry I have no information on the point.

How far and in what ways was the import by sea (1) of food-grains and (2) of other commodities affected?—I have no figures on the point. I think there is no doubt that a certain import of food-grains took place, whereas usually no such trade exists except from the Coast ports. There is no doubt that the import of Manchester goods, such as cottons, etc., decreased considerably.

Is there any evidence that a permanent rise in the price of food-grains in India has taken place of late years?—I am inclined to think that it is doubtful. I have not got sufficient information of the conditions of trade on the Bombay side of India, but as regards the Calcutta market I consider it doubtful whether it is so.

If such a rise has occurred, do you think it is in any way connected with the fall in the Indian exchange?—I put in a graphic diagram* I have prepared, of the course of exchange and prices of rice in the Calcutta market for 15 years.

What is the conclusion you draw?—The price of rice has not followed the course of exchange. It has risen perhaps slightly on the average. I have no information about other food-grains—maize, dhal, etc.

(*Mr. Holderness*).—The rice seems to have fallen to very low figures in 1893-94 and 1895-96?—Yes, that is the ordinary *balam* rice used by the better class of natives in this country; you will see that the price usually falls as soon as the new crop comes in at the end of December. This refers to the most important article of food in Calcutta.

(*President*).—Is the export of food-grains from India, in a series of years, on such a scale as to

Mr. A. S. Gladstone.
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1898.

Mr. A. S. Gladstone.
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 —

materially affect the ability of the country to feed the population or to materially reduce the reserve stocks held at a particular point of time in the country?—I cannot answer this question from personal knowledge. My impression is that reserve stocks are generally held and not materially reduced.

In ordinary years is the import of food-grains by sea for consumption in the port town, and for distribution into the interior large?—No.

Is this trade in the hands of European or native firms?—In the hands of native firms.

What grains are chiefly imported and from what foreign ports?—As a rule there is no grain imported from foreign ports, though a certain amount of rice comes from Orissa and further down the coast, into Calcutta every year. There is not much from Burma in ordinary years.

When prices of food-grains rose rapidly at the end of 1896, were the stocks of rice and other food-grains large in the port?—No, I think not; they were below the average.

Did the high prices reached at the end of 1896 lead to much speculative dealings in grain?—I cannot say. Such dealings would be in the bazaar, and I have no knowledge of those dealings.

You were not concerned with the import?—We imported one cargo of wheat from California in December 1896.

What was the result?—It was sold by us; it changed hands once or twice before it went into consumption.

Did you sell it without loss?—We sold it at the time we bought it, simply making a commission; the cargo was offered to us from home and we offered it here for sale. It was bought by a firm of Jews here.

Was there a good margin between prices?—Yes, at that time there was.

Did that margin continue?—In wheat it soon disappeared because the Californian and American markets rose very rapidly. It happened at the time that the opinion prevailed in Europe that the crops were short and a very great rise set in in England. The cargo we imported was shipped by steamer direct from San Francisco. The ordinary trade is almost entirely carried on by sailing ships from that port.

Can they be used to bring grain across the Pacific to India?—Yes, ships would go by the south of Australia and take about five months in the passage.

If India drew on California for trade how would it be carried on?—To do so with speed would require steam navigation.

Did the import of grain from California stop?—I think it stopped on account of the margin disappearing; there were no other obstacles; there were four cargoes landed in India, and each had been bought before the rise in California took place.

Was any maize to be had in America?—In New York, not in California.

Did any maize arrive here?—Yes, a small quantity. We had a small shipment which was ordered by the Bettiah Raj; there were other small shipments in parcels of about one or two hundred tons.

What margin was there?—I cannot say. It was very difficult to get natives to buy it; the samples were very different from the Indian maize; the natives did not at first care to buy it, but after using it they seemed to take to it.

The maize was in seed, not in flour, I suppose?—Indian corn, not Indian corn meal.

(*Dr. Richardson*).—Is it different to Indian maize?—The samples that were sent to us were all different from Indian maize. The American (New York) maize is larger and thinner than the Indian.

(*President*).—Were the imports of Burma rice chiefly carried on by Europeans or natives?—By both.

On the indent or orders of up-country dealers?—I cannot say, I have no information.

Was there any difficulty in getting rid of stocks of Burma rice or did they accumulate?—My own experience is limited to one or two small shipments, which were imported from Rangoon and which went to Indigo factories. I heard from indigo factories that the natives did not like

it at first, but afterwards they got accustomed to it and seemed satisfied with it.

Was there always a profitable margin between rice prices in Burma and here to admit of continuous import here?—The imports of Burma rice went on for many months last year. I cannot say what the margins were.

It has been stated that in the event of India requiring large imports of grain from America or Europe, European firms at the ports would find more difficulty in engaging in such import trade than in the case of the grain export trade; that is to say, the reversal of the ordinary process of trade would be accompanied by special risks and difficulties. Is this so?—I think so to some extent. It is always easier to conduct a trade already established in which the customs are well known and understood by everybody. In the case of a new large trade, such as the import of food-grains for famine purposes, there would naturally be a number of unforeseen occurrences to be dealt with.

It would be sold to native firms for distribution: would there be any risk of not recovering from them if the market fell?—Probably. Native firms would be the distributors and there would be difficulty if the market fell.

The largest export houses have, it is believed, many up-country agents in the interior who place contracts for purchase of grain for export with native dealers. In the event of India requiring to import grain, could not contracts for sale of grain be placed with up-country dealers by the same agency?—We have no such agencies up-country so I cannot say.

Within how many days could 20,000 or 30,000 tons of wheat or maize be landed in India from Europe or America after a contract had been placed in this port?—I should say within 80 or 90 days.

In that interval prices in India might have so fallen as to prevent the importer from making the profit he had anticipated?—Yes, most decidedly.

Is this contingency one of the causes which might prevent grain from being imported from distant countries to India, in spite of prices being so high for the time being in India as to hold out expectations of considerable profit?—Yes, I certainly think so.

Might there be a serious panic in the Indian grain markets, resulting in dealers refusing to sell or extremely high prices being asked, without its leading to imports from abroad being arranged for?—I think there might be before any imports large enough to be of any use could be arranged for.

Do you think that the offer of a bounty on each ton imported, or the direct purchase by Government of grain for feeding the poor on relief works would have eased the market?—I think so.

What would be the effect of an offer of a bounty?—It would lead to a large import; it would have eased the market.

Would it have any injurious effect on private trade?—The offer would increase private trade.

What would have been the effect in the grain markets of foreign countries of intelligence that the Indian Government was purchasing, or encouraging the importation of grain?—The prices would be affected to some extent.

To what extent?—That would depend upon the anticipations of what quantities India would take.

Was the want of activity in the grain import trade from America or Europe in any way due to the dearth of money in India in the winter of 1896-97, and to the difficulty in obtaining accommodation?—I do not think so.

You do not think the offer of a bounty would so raise prices in America or anywhere else as to destroy the margin?—I think it would be quite possible; but as to whether it is probable would depend on the quantity which it was anticipated India would take.

Do you think the late high level of prices throughout India was on the whole natural and reasonable, being due to knowledge of the failure of harvests in certain tracts and of unusual lowness of stocks in other parts of India: or do you think that in the country as a whole there was grain enough for all probable contingencies and that the high level was due either to unreasonable panic, or to wild speculation and holding up for high profits?—I think it was a reasonable rise.

Do you think that anything in the nature of a ring or combination among dealers to hold up prices is possible in India at the present day?—No, I do not think so.

There is no large combination possible in the country as a whole?—No, not so as to raise prices throughout India. In special instances you might find small rings formed, but no general ring exists or is likely to be formed.

In the late famine prices went up very quickly and evenly during the winter throughout the country. Can you explain in what way that was effected; who does the thinking?—I think it is the telegraph.

It is done in one place and others follow suit?—Yes, for instance, Cawnpore would follow Delhi and Calcutta would follow Cawnpore or vice versa. It is all done by telegraph.

It may be rational or irrational?—Yes.

The attitude the Government of India took up in the recent famine was that they would not interfere in any way with trade; they would merely find money for the destitute with which to buy grain to keep themselves alive. Under these circumstances do you think there is any danger of a sort of combination among grain dealers to keep prices high?—No, I do not think there is much danger of any organized combination. There is only the natural trade instinct; a man who holds stocks will do so as long as he thinks the market will rise. Then when everybody expects a rise it sends the market up. I don't think there is any organization possible among the natives who are the people who hold the stocks in the country; they are far too jealous of one another; they have no idea of a combination such as occurs sometimes in Europe.

Suppose the Government took up the attitude that it would import grain from abroad for relief works and poor houses only, and would leave the general market to be supplied by private trade, do you think such an attitude or policy would act injuriously on private trade, or destroy it?—Not at all: I don't think so.

Do you think it would have the effect of lowering prices in the country?—I think it would have the effect of keeping them down; it would have been a big business for Government to undertake. It could have been done through the agency of the merchants here or in Bombay and elsewhere.

Where could rice have been got from if you exclude Burma?—From nowhere else. There were, however, very large stocks of grain in Rangoon in 1896.

Could it not be got from Siam, Cochin China, Java?—It would be very expensive to obtain it from Siam. There is no large surplus there, as a rule, I believe. A great quantity goes from Burma to the Straits and is sold there very cheap in ordinary times. Java and other countries could not assist.

(Mr. Holderness).—You say 400,000 tons of rice were exported from Calcutta?—I would put the average for 15 years, excluding 1897, at 413,000 tons per annum.

Does that include Burma rice brought to Calcutta to be exported?—There may be some, I have no details of the different sorts of rice. My figures are compiled from Custom House returns, which do not say what sort of rice it is.

Is there a constant import of rice from Burma into Calcutta?—If I had had more time I could have got more figures on the subject. Rangoon does far more than the rest of Burma in the way of exports. The export to India in 1894 was 164,000 tons, in 1895, 73,000 tons, in 1896, 76,000 tons, in 1897, 542,000 tons, including all ports.

(President).—Besides wheat and maize is there any other grain obtainable from Europe or America?—I think only wheat and maize.

(Mr. Holderness).—In the monsoons would it be possible to import grain from America or Europe?—I think so.

The monsoon would not stop it?—I see no reason for the monsoon stopping it.

There is no special difficulty in the monsoons?—No.

You said there was a large surplus of rice in Burma which the Government might have bought?—Yes.

Suppose Government had decided to buy Burma rice could it have placed its contract in the market before its intention was known?—If the order had been given to some houses in Calcutta to act quietly and to buy

up as much as possible, I think a large quantity of rice could have been secured.

If every possible precaution had been taken could secrecy have been observed?—Not for very long.

How much could you have bought before it got out?—In October or November 1896, about 3 or 4 lakhs of bags of 2 cwt. per bag.

Of the two policies of offering a bounty and direct importation which is best?—I should say direct importation.

Why?—I don't like bounties; besides, there are working difficulties. I don't know how they would be fixed.

What is your idea of what an effective bounty might have been on wheat for instance?—That is a difficult thing to answer; take what happened outside India; in September 1896, wheat could be had in California at 28 shillings per quarter and by November the prices rose about 8 shillings a quarter; such a rise in prices might make a bounty of very little effect.

Suppose Government had offered a bounty of 10 shillings a quarter?—After the rise it would have had little or no effect.

(President).—It does not preserve a margin?—No, and it would probably raise the selling markets against you.

A bounty cannot be relied on to bring grain into the country?—No.

Nobody can safely predict what the effect of direct importation would be? Would it lower prices in India?—It would tend to keep them from rising, it would check the rise of food-grains to famine rates.

(Mr. Holderness).—Suppose the Government imported direct, would the effect be to strengthen prices in Burma and to keep down prices in India?—Yes.

Direct importation by Government would interfere with private trade?—Yes, to some extent.

Still it would be a good thing for the country? Yes, by keeping down prices. The interests of private trade in such a position are confined to the interests of speculative merchants; the wants of the country are paramount.

Ordinary trade, as distinct from speculative, would not have been hurt?—The ordinary course of trade would not have been affected.

You said the rise in prices was not irrational?—No.

If it had been irrational, would there have been a collapse ultimately?—I don't know; there has been a pretty good collapse since the beginning of December in the prices of rice.

There has been a steady fall since the harvest was assured?—Yes.

Some people have suggested that the prohibition of the export of grain would be a good thing at a time of famine?—I think any measure of that sort which tends to prevent prices from rising is a good thing and justifiable. I see an objection in the case of the West Indies where a certain amount of rice is shipped for East Indian coolies, and in the case of Mauritius and South Africa. As regards the general export of food-grains I think Government might very well check it in time of famine.

How would that affect forward contracts?—That would be a difficulty no doubt; no such circumstances are provided for in private contracts.

Suppose Government did do that, there would be difficulties?—Yes.

But for the rise in Europe you think the import trade in wheat would have gone on?—Yes, I think it would.

It was the rise which spoilt it?—Yes.

There must be a considerable margin in prices between India and America to warrant a man undertaking the risk of importing?—Yes.

Such a risk could not be safely undertaken while the crops were doubtful?—No, very few people would undertake the risk.

(President).—You said that direct importation for relief works might have done good by lowering prices generally; how would that have acted on the minds of the grain dealers?—It would have had a material effect in inducing them to sell more freely.

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Mr. AMBROSE RODOCANACHI, of Messrs. Ralli Brothers, called in and examined.

(President).—You are the representative of the firm of Messrs. Ralli Brothers?—Yes.

The firm is engaged in the grain export trade of India?—Yes.

How far and in what ways was the export by sea of the various food-grains affected by the famine and scarcity?—Greatly reduced. I would like to state that to this and other similar questions my answers are based on general impressions, and not on statistics which, owing to conflicting factors, are misleading unless exhaustively treated.

How far and in what ways was the export by sea of other commodities affected?—I should say that the export of other products had increased on the whole.

Can you give a reason for that?—Yes, I should say that, owing to the high price of food-grains, all other products were pressed on the market to procure cash.

How far and in what ways was the import by sea (1) of food-grains, (2) of other commodities affected?—The import of food-grains was increased and the import of piece-goods, etc., was reduced.

As much reduced as you would have expected?—Hardly as much.

Is there any evidence that a permanent rise in the price of food-grains in India has taken place of late years?—I think that on the whole the price of food-grains is higher than it was ten years ago.

If such a rise has occurred, do you think that it is in any way connected with the fall in the Indian exchange?—I am not prepared to reply very definitely to this question, which involves many debateable points. I consider, however, that prices in India are enhanced by a fall in exchange and reduced by a rise.

Is the export of food-grains from India in a series of years on such a scale as to materially affect the ability of the country to feed the population or to materially reduce the reserve stocks, held at a particular point of time, in the country? I consider that the export of food-grains from India affects the ability of the country to feed the population most beneficially by stimulating production. I think that the reserve stocks are larger in consequence of the export trade.

That stimulation would act in respect of the particular grains exported?—Yes, but it is not necessarily limited to that, as many food-grains that are not regularly exported can always find a market abroad at a price.

In ordinary years is the import of food-grains by sea for consumption in the port-town and for distribution into the interior large?—I understand that this question has reference to foreign ports. The import is trifling and on a retail basis.

Is this trade in the hands of European or native firms? It is so small that my attention has never been drawn to records of it.

What grains are chiefly imported and from what foreign ports?—I am afraid I cannot tell you for the same reason.

When prices of food-grains rose rapidly at the end of 1896, were the stocks of rice and other food grains large in the port?—In Calcutta they were small.

So far as the information went, were food stocks large in the interior of the country, or in any particular province?—Yes, but it is hard to arrive at a definite conclusion on this point.

Was that as regards particular provinces?—I cannot say, as my attention was not directed to stocks in detail but to the total stocks of the country.

What was the general impression as to the extent to which these stocks would prove sufficient for the food requirements of the country without importation from abroad? Was it that they would be placed on the market, or held up?—It was considered that the stocks were sufficient to carry over to the harvesting of the summer crops. All the stocks would be placed on the market, but at advancing prices.

Did the high prices, reached at the end of 1896, lead to much speculative dealings in grain?—Yes, on the part of natives.

What sort of speculation was it?—Buying, and selling again in a day or two; "Jobbing" in fact.

(Mr. Holderness).—They often do that at the approach of the monsoon also?—Yes.

Without ever seeing the grain?—Yes, very often their prices are different from the actual legitimate market rates. They are in fact paper-contracts.

(President).—Did the grain-dealers show activity in actual buying and distributing grain?—I think so, but I cannot say that I have studied the question.

Were these high prices maintained?—Broadly speaking they were maintained till the summer crops were secured.

Did the price of rice in Burma, and of wheat and maize in Europe and America, rise in consequence of apprehension of diminished food-exports from, or of an anticipated demand on account of India?—My information about Burma is at second-hand, but I do not doubt that the price of rice advanced. The price of wheat and maize in Europe and America would undoubtedly be affected by the fact that an exporting country had become an importing one.

Were shipments of grain made from American or European ports to India?—Yes, they were on a small scale because there was no genuine demand. They reached about 25,000 tons.

Why was there no genuine demand?—Because the stocks were really sufficient and those interested in the trade did not consider the position critical.

Was there a sufficient margin at the end of 1896 between the prices of wheat or maize in India, and the prices of those grains in Europe and America to make import into India profitable?—At one moment there was, but it only lasted a day or two.

That was owing to the rise of prices abroad?—I do not quite recollect, but I think buyers withdrew on this side.

If such a margin existed, but grain was not imported, what were the obstacles in the way of the establishment of the trade?—As previously explained there was no margin except for a day or two.

In ordinary years what quantity of rice does Burma export to India and other countries?—I am not in a position to give special information on this point, and I do not think that the official statistics could be supplemented.

From November 1896 to October 1897 what quantity of Burma rice was imported into this port?—I cannot say much about this.

Were these imports mainly for despatch to the interior?—Ultimately probably they were.

Were the firms on whose account these Burma imports were made chiefly European or native firms?—Both, I should say.

Were these imports made on the order of up-country dealers for Burma rice, or by Calcutta firms at their own risk in anticipation of the demand of up-country dealers?—Largely at the risk of the importer. Such risks would be taken more readily from Burma than from Europe or America as the risk is much shorter.

Would there be any difficulty in shipping large consignments of grain from California into India if the market were favourable?—No.

Could it be done by steamer or sailing vessels?—By either.

How long would sailing ships take?—Three to four months.

Was any difficulty at first experienced in getting up-country grain-dealers to take Burma rice, and did stocks in consequence tend to accumulate and the price to fall in the port?—My information is again second-hand, but I believe the answer is "yes" to all these questions; there was a prejudice against this rice, as was also the case with Californian wheat.

Was there always a profitable margin between rice prices in Burma and here to admit of continuous import here?—I cannot reply to that.

It has been stated that in the event of India requiring large imports of grain from America or Europe, European firms at the ports would find more difficulty in engaging in such import trade than in the case of the grain-export trade; that is to say, the reversal of the ordinary process of trade would be accompanied by special risks and difficulties. Is this so?—Yes.

What would be the prominent difficulties?—The most prominent difficulty would be that of selling to arrive in small quantities up-country. This would prevent the large dealers at the ports from buying cargoes to arrive from importers. I think, however, that if any article of import were urgently wanted all such difficulties would disappear.

Would there be the risk of not recovering the money from native dealers?—Not beyond ordinary trade risks.

The largest export houses have, it is believed, many up-country agents in the interior who place contracts for purchase of grain for export with native grain-dealers. In the event of India requiring to import grain, could not contracts for sales of grain be placed with up-country dealers by the same agency?—It would be difficult to place such contracts, as up-country dealers would not face the risk of buying for forward delivery which would be very great.

Would the ordinary course of trade be for the European importing house to deal with the native firms in the port, and for those firms to place the grain in the up-country markets?—Yea.

Would the European houses import at their own risks or only in fulfilment of contracts with native firms?—That depends upon the idiosyncrasy of each importer, but I may say that trade is now conducted by most firms on the basis of more or less simultaneous purchase and sale.

Within how many days could 20,000 or 30,000 tons of wheat or maize be landed in India from Europe or America after a contract had been placed in this port?—If the purchase were made irrespective of price, I should say, very roughly, six weeks.

In that interval prices in India might have so fallen as to prevent the importer from making the profit he had anticipated?—Yes, unless he had sold "to arrive."

Is this contingency one of the causes which might prevent grain from being imported from distant countries in India, in spite of prices being so high for the time being in India as to hold out expectations of considerable profit?—Yes.

Might there be a serious panic in the Indian grain markets, resulting in dealers refusing to sell or extremely high prices being asked, without its leading to imports from abroad being arranged for?—No; not if the panic were warranted.

Do you think that the offer of a bounty on each ton imported, or the direct purchase by Government of grain for feeding the poor on relief works would have eased the market?—For the time, yes.

The bounty would not discourage private trade?—Not in that particular instance perhaps, but in a general sense it would affect private enterprise unfavourably.

What other effect would it have?—I have not really thought it out. In any case the bounty would have been a facility for doing business to certain firms only, and would give them advantages over others not working in the particular article to which the bounty applied.

Do you think if a notification were issued that the Government of India was going to give a bounty on particular grains it would have the effect of raising prices in foreign countries?—Not to a very great extent under such exceptional circumstances. But I greatly doubt if a bounty would have the desired effect of increasing import. It would be a very difficult thing to work.

As regards direct importation by Government, what would be the effect?—I think it would have disorganized the market.

But if Government should pledge itself only to get grain for the poor on its works?—Even in that case I think it would.

Was the want of activity in the grain import trade from America or Europe in any way due to the dearness of money in India in the winter of 1896-97, and to difficulty in obtaining accommodation?—No.

Could Government with advantage have stimulated import by loans on contracts?—No.

Do you think the policy of stimulating import by loans or contracts would disorganize private trade?—I think loans would never be necessary or even useful, and contracts might be considered the thin end of the wedge and confidence in Government's attention even under ordinary circumstances would be shaken.

The relief workers were paid a cash wage sufficient to enable them to buy a stated quantity of food, the

wage varying week by week with the local grain prices. If Indian food-prices throughout the famine were lower than the price at which grain could be laid down in India from Europe or America, might not importation by Government of food for some of the relief works have made those particular relief operations costlier than they have actually been?—Obviously so.

Would this disadvantage have been compensated by a lowering of prices in India, owing to which other relief works would have been less costly, and the public would have been enabled to buy food at lower rates?—In all probability, yes.

If we may suppose that prices would have fallen in consequence of the Government undertaking to import from abroad to feed the relief workers, would this have caused less rice from Burma to have been imported?—It may be assumed that a fall in prices in the importing market would reduce imports to some extent.

What reductions were made in railway rates on grain from the sea-board to the interior, and had such reductions an effect on trade?—I am not quite prepared to reply to this.

Can you think of any possible combination of circumstances under which it would be advisable for the Indian Government to import foreign grain itself for its relief purposes, or to stimulate such import by the trade, by loans, contracts, or bounties?—No, I cannot imagine any such combination of circumstances.

Was there ever a time during the recent famine when Government might, in your opinion, have tried such measures with advantage?—No.

Can you conceive of any case in which prohibition of exports would, in your opinion, be of advantage?—No.

Do you think the late high level of prices throughout India was on the whole natural and reasonable, being due to knowledge of the failure of harvests in certain tracts and of unusual lowness of stocks in other parts of India, or do you think that in the country as a whole there was grain enough for all probable contingencies and that the high level was due either to unreasonable panic, or to wild speculation and holding up for high profits?—I should say it was natural and reasonable, because though stocks were sufficient they were not more than sufficient; further, bad crops later on would have made the situation extremely critical.

Do you think anything in the nature of a ring or combination among grain-dealers to keep up prices beyond natural limits is possible in India?—Possibly a local one, but not in the circumstances under consideration. Native dealers, however, follow one another in a particular line of action though there has been nothing preconcerted between them.

I suppose you would say that Government is incapable of dealing with it?—I should think so, even if there were an organised ring. There would be nothing definite for Government to get hold of.

In the autumn of 1896, when prices rose all over India, on the whole in an even way, who do you suppose did the thinking and calculations? Was it done in a rational sort of way?—I should say not; I should say that the probability of high prices being reached forced itself on peoples' minds.

One market followed the other market?—Yes.

With reference to the attitude of the Government of India in the recent famine as regards not interfering with trade in any way, and at the same time providing destitute persons with money to buy food for necessities, at current market rates; in former times Indian grain-dealers had two risks to fear—(1) risk of tumult; (2) risk of people dying; our Government have done away with these two risks and is at the mercy of grain-dealers; do you see any way of getting out of it?—No, but I think that the risk to the dealer of pecuniary loss if he holds out too long is quite sufficient to keep his prices within reasonable bounds. I consider that a rise in prices throughout the country is usually the result of unanimous opinion.

Is there much danger of this opinion being irrational?—There was nothing abnormal or irrational in prices during the late famine. Foreign import is the check on the native dealer who gauges the situation pretty accurately, I think.

I suppose the fact that prices continued high for so long a time is one fact that makes you think that the

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Mr. A. Kodocun-achi. opinion was rational?—Yes, to a certain extent. It shows there were no very heavy stocks which holders were keen to get rid of.

20th Jan. 1898. (*Mr. Holderness.*)—I read paragraph 24 of my narrative report on the famine; will you say how far you agree with it or disagree?—Of course, I am not in a position to express an opinion on your figures or to criticise your conclusions without studying all the points, but on a hasty perusal of this paragraph, it strikes me that the increase in production on which you arrive at your conclusion is under-estimated.

If your stocks are accumulating, the fact of the accumulation ought to be seen in the falling of prices?—Hardly so, because there are many other factors at work—exchange among others.

Would your opinion be that at present the amount of export has not seriously trenched on the food-supply of the people?—Yes.

You said the effect of the famine was to increase the exports of everything except food-grains?—I meant all seeds or grains other than food-grains.

Had that any effect on silver?—Yes, but I have no information as to whether the people sold their ornaments and jewelry.

Might I take it that the general drift of your evidence is that in widespread scarcity prices might rise to any conceivable limit without necessarily attracting imports from distant countries?—No, if stocks were really running short, import would certainly take place. The prices were not high enough to admit of large import during the late famine because the supply was sufficient, though the position was undoubtedly critical. My belief is, in short, that if foreign food-grains were necessary to prevent starvation, import would take place.

Do you think in India there is sufficient commercial activity to buy foreign wheat?—Yes, if the position were so very much strained as to require it.

Is it the case that about April or May when the cold weather crops ripened in the Panjab, prices began to fall?—Yes.

That fall is an indication that the previous high prices were not rational?—No, that does not follow; my impression is that they were not unreasonably high; under abnormal circumstances prices almost invariably go somewhat too high or too low, but they right themselves afterwards, as happened in this case.

If the late monsoon had proved a failure, would we have been in a very difficult position now?—Yes, in a sense; but imports would probably have saved the situation.

In that difficult position up to the end of October we would be hardly certain as to the final result of the monsoon?—Yes, up to about September.

As long as the monsoon is in doubt, exporting from foreign countries would be risky?—Yes.

So, if the monsoon finally failed, there might be some extreme panic?—Yes, but I think import would have taken place before that point was reached.

Then in the circumstances would the intervention of Government be necessary?—That is a serious case, but I think that the intervention of Government would not have been necessary.

Do you think there is no special difficulty in the fact that the bulk of the grain-dealers are small men who might make the situation serious by holding up their stocks simultaneously?—Yes, serious as regards prices. But I hardly think the first buyers can be called small men; I think the first buyers are big men and that the grain eventually passes into the hands of bunnias who retail it and will always sell at a price.

The bunnias are under no contract to sell?—No.

You cannot advise any measure except total abstention on the part of Government?—No. Any interference might make a famine more disastrous than it would otherwise have been.

(*Mr. Bose.*)—The speculative paper-bargains you spoke of,—did they affect the rates of real contracts, where actual delivery was intended and made, and did they in any way cause any rise or fall in the prices of food-grains?—To a certain extent; this was not due to the famine, this is always going on.

Are not the rates quite separate?—Yes.

Did they really affect the rates?—No, I think not.

Speaking generally, were large profits made by dealers engaged in the genuine grain trade during the late famine, or were the profits realised such as would under the circumstances be considered more than what was reasonable?—It is very hard to say, some had profits and some had losses, those doing genuine business must have profited.

(*Mr. Holderness.*)—Are there large collections of grain held by individual firms of natives?—That is very hard to say; the stores are spread over the country, but I should think very few hold large stocks in any one locality except at the port for export.

I have not been able to ascertain whether a native merchant usually has got large stocks, or whether, when he gets an order, he sets about gathering in from different places?—I should say he would set to work to gather it, but sometimes he holds it.

Have you any information as to whether the grain pits have been depleted?—No, no special information; my attention has not been specially drawn to that fact.

In the Panjab there are some very old stocks and it was said that some of the grain in the market was drawn from these stocks?—Very probably so. The high prices would probably induce this.

(*Mr. Bose.*)—You think there was no deliberate concerted combination to raise rates beyond what, under the circumstances, constituted the natural level of prices?—I think not; I have certainly not heard of any ring. I should say it was improbable, and I think that prices rose in the natural way. A deliberate combination is almost impossible among the class of men who ultimately retail food-grains, and I have no reason to believe that large stocks were held by important dealers.

MR. A. P. MANASSEH, of Messrs. Manasseh & Co., called in and examined.

Mr. A. P. Manasseh. (President.)—Your firm imports grain?—Yes, from Burma, Siam, and Saigong.

20th Jan. 1898. How far and in what ways was the export by sea of the various food-grains affected by the famine and scarcity?—It was greatly reduced. I think that the export of food-grains gradually diminished from 1895-96; the last export we did to the Straits was in 1895; in 1896 there was very little or nothing.

Chiefly rice?—Yes, also gram and dhal.

Do you know where the Straits got their supply from?—From Saigong and Burma.

Are the prices in Saigong and Burma generally level?—It depends on the crop; sometimes to get rice from Saigong pays better.

Is there a large amount from Saigong?—Burma supplies most.

Is Siam a large market?—Yes.

How far and in what ways was the import by sea (1) of food-grains, (2) of other commodities, affected?—

The import of food-grains was increased. The import of piece-goods, etc., was reduced.

Is there any evidence that a permanent rise in the price of food-grains in India has taken place of late years?—There has been very little rise, but it all depends upon the demand.

You could not gather whether there was any permanent rise?—No.

When prices of food-grains rose rapidly at the end of 1896, were the stocks of rice and other food-grains large in the port?—No, not that I know of. They were not low either.

Have you any information as to the food stocks in the interior?—No.

In ordinary years what quantity of rice does Burma export to India and other countries? Please give figures showing the distribution if you can.—Burma exported to India in 1897 (calendar year) 543,000 tons, in 1896, 75,000 tons, and in 1895, 73,000 tons. The latter figure is about the ordinary amount. We take the ordinary amount as from 65,000 to 70,000 tons.

As regards the Burma rice imported in ordinary years, where does that go?—It does not come to Calcutta. It goes mostly to Bombay.

Was a good deal of it used for consumption in India, or for re-export?—No, for consumption in India, because Burma supplies Europe direct.

In ordinary years no rice comes from Burma to Calcutta for use in India?—No, not in my experience.

Were the firms on whose account these Burma imports were made chiefly European or native firms?—They were both.

Did the Europeans import at their own risk, or on orders and orders from natives?—At their own risk; course with the help of orders.

Was any difficulty at first experienced in getting country grain dealers to take Burma rice, and did as in consequence tend to accumulate and the price to in the port?—When Burma rice first came in there some doubt whether it would be accepted, but when went into the market it was taken easily.

Was there always a profitable margin between rice prices in Burma and here to admit of continuous import here?—Yes, as a rule; at one time it did slacken and stocks accumulated, but that did not last long.

When did the import of Burma rice cease?—It stopped in September or October, but I hear there is still a little coming in; the stock here was all sold off at the end of October.

It has been stated that in the event of India requiring large imports of grain from America or Europe, European firms at the ports would find more difficulty in engaging in such import trade than in the case of the grain export trade; that is to say, the reversal of the ordinary process of trade would be accompanied by special risks and difficulties. Is this so?—I don't think I could answer this safely.

It seems that at present European firms are all engaged exporting grain, not importing; suppose the necessity arose for importing, would it be easy to reverse process?—There would be no difficulty in importing; when the grain is really required there will be no difficulty in disposing of it. In the first instance we did consider it profitable to bring rice, but once we started, got it in large quantities. European firms would say "to sell to arrival."

Supposing prices fell, do you think there would be difficulty in getting native firms to take delivery?—Yes, unless you made them an allowance.

Would you have some difficulty in enforcing their contracts?—Yes; we had some difficulty and had to make an allowance.

If there was a real demand for grains from foreign countries, do you think the merchants would import?—Yes.

Would they import at their own risk?—Yes, they would.

Can you think of any possible combination of circumstances under which it would be advisable for the Indian Government to import foreign grain itself for its relief purposes, or to stimulate such import by the trade by loans, contracts, or bounties?—I think if Government did

make contracts with merchants to supply these things, they would do better than if they imported themselves.

Do you think it would be better to make contracts or trust entirely to Free Trade?—If the requirements were very great it would be better to make contracts.

If it appeared that private trade was not sufficiently active?—Yes.

We have heard of rings or combinations among traders to raise prices of some articles above the prices they would naturally reach by the law of supply and demand. Do you think any such ring or combination is possible in the matter of food-grains in India now? Do you think any such rings were formed during the late famine?—Not that I am aware of. I don't think rings can be formed in a large place like India. It might be possible in Singapore, for instance, where the merchants can combine, but not in a place like India.

(*Mr. Holderness*).—How long does it take rice to come from Saigong?—About a fortnight or 20 days. It would come *via* Singapore.

Is that rice liked in India?—Yes, but it would not do for very poor people; it is for the middle class, it is more expensive and finer than the Burma rice; you could not supply it for famine work.

When did the import of rice from Burma stop?—About the month of October 1897. I suppose stocks at that time were exhausted in Burma.

By that time was the Burma surplus sold?—Yes, more or less.

Suppose the rains had failed in September last instead of being good, would there have been rice in Burma for us to get?—Not much.

Where would you have got your grain from?—From Saigong.

Was there any left there?—Not very much.

If Bengal had no rice, and prices were high, where would you have gone for grain?—I cannot say. I suppose you must depend on Saigong and Burma.

Would you import from America or Europe?—No.

Did you ever make any calculation whether maize might have been imported from America at a profit?—Yes, but we did not know how long this famine was going to last. Our calculations showed a possible profit, but we did not like to risk the length of the journey.

If there had been maize in Burma, would it have been imported?—Yes, as the journey is a short one.

As regards grain for relief works, I suppose the grain you imported went to districts where there were relief works?—Yes.

Did it go to relief works through bunniah?—Yes, I think so.

Could the Government have put it on to relief works cheaper by buying it themselves or contracting?—If you contracted directly you would have laid it down cheaper. I sent some rice to Cawnpore and other stations, and after paying railway freight it left me a profit of four to five annas more than I could have got here.

Do you know any instance where grain failed to reach relief works; where the trade did not supply it?—No.

Mr. A. C. ADAMS, of the Arracan Company, called in and examined.

(*President*).—The Arracan Company imported the greater part of the Burma rice last year?—My firm imported rice from Burma and Siam, more largely probably than any other European firm.

Did the prices of Siam and Burma rice differ much as a rule?—Yes. Siam rice is very much preferred; it is similar to the ordinary white rice; it is a smaller grain than the Burma rice.

What about the Saigong rice?—That did not go very well.

Was there any difficulty in getting rid of the Burma rice?—No, but the market fluctuated a good deal owing to heavy shipments by native firms.

Did the European firms import at their own risk?—We imported both at our own risk and on orders.

When prices of food-grains rose rapidly at the end of 1896, were the stocks of rice and other food-grains large in the port? No, I don't think they were. At the end of 1898 we ourselves had 10,000 tons of Burma rice already stored here in godowns at Garden Reach.

Were stocks unusually low or high in Calcutta?—I think low. But there was a good stock of rice in Burma. The Burma season does not open till the 15th of January, and then the rice is too new to be fit for consumption.

So far as the information went, were food stocks large in the interior of the country?—I cannot say.

(*Dr. Richardson*).—How long does rice take to mature?—I believe in India they keep some kinds for two years, that is the white rice. Our chief business in Calcutta is in old yellow rice, we buy it in January and ship it in September.

Mr. A. P. Manasseh.

20th Jan. 1898.

Mr. A. C. Adams.

20th Jan. 1898.

Mr. A. C. Adams. Would it be unsafe to use fresh rice?—I believe so.
(President).—Did the high prices reached at the end of 1896 lead to much speculative dealing in grain?—Yes.
 What kind?—I don't know whether it led to much speculation in Calcutta, but there was enormous speculation going on in Rangoon, buying forward and selling.
 Was the effect of that speculation to unduly raise prices?—I think it raised prices to a certain extent.
 Do you know whether the prices of wheat and maize in America and Europe were raised by the Indian scarcity?—I cannot say.

In ordinary years what quantity of rice does Burma export to India and other countries?—From the 1st of January to 30th November 1897, India took from Rangoon 523,290 tons, and in 1896, 55,000 tons. Of that 55,000 tons, 20,000 to 25,000 were imported for the famine.

The ordinary figures are very small?—Yes, I think under 20,000 tons.

The Calcutta figures of import and despatch are?—I put in statements. The figures in the statement of imports are taken from the Custom House and those in the statement of despatches of rice from the East Indian Railway.

Statement showing the total Imports of Paddy and Rice from all places from 1st January to December 1897.

Destinations.	January.	February.	March.	April.	May.	June.	July.	August.	Up to 30th September.	October.	November.	Decem.
	Tons swt.	Tons swt.	Tons swt.	Tons swt.	Tons swt.	Tons swt.	Tons swt.	Tons swt.	Tons swt.	Tons swt.	Tons swt.	Tons swt.
Rangoon	34,833 1	35,406 0	36,314 0	37,174 5	38,455 18	15,468 19	29,277 4	30,483 7	3,226 15	15,113 2	4,864 7	1,070 8
Balassore	2,978 19	1,073 9	1,815 17	2,223 7	1,128 1	1,073 19	1,353 4	693 11	694 6	178 5	761 0	1,033 2
Chandball	1,820 4	1,244 2	2,286 12	3,500 0	3,694 1	2,664 11	3,693 17	4,949 9	3,451 7	2,798 2	2,116 16	2,396 19
Cocanada	213 8	..	1 0	44 0	483 13	1633 18	58 13	137 19	0 1	..	..	..
Moumein	4,258 10	2,783 11	3,668 17	3,508 3	5,195 19	4,336 11	1,998 15	2,455 11	2,115 3	1,067 10	2,129 13	378 19
Penang	4	..	1 13	..	..	..	..	..	..	..	..	..
Akyab	79 9	468 12	2,465 13	688 10	6,233 4	693 0	230 4	400 1	..	..	..	..
Bimlipatam	41 11	14 17	..	57 18	38 9	..	..	..	..	..	..	..
Masulipatam	167 18	..	..	..	..	15 3	..	..	..	..	..	..
Hong-Kong	..	0 6	0 9	..	..	..	..	..	..	..	..	..
Bandoway	..	..	21 13	..	..	..	..	..	..	..	..	..
Singapur	..	..	..	499 13	386 0	2,799 2	982 12	1,815 7	2,914 19	1,440 2	125 17	..
Gopalpore	..	..	..	..	..	..	..	..	..	..	..	..
Colingapatam	..	..	..	..	44 0	..	..	..	..	..	..	..
Bassien	..	..	..	..	89 4	754 0	..	..	..	..	..	..
Madras	..	..	..	..	..	11 0	263 14	637 19	260 9	..	9	..
Chittagong	..	..	..	..	..	..	82 8	77 0	..	..	..	..
Total	44,387 6	30,990 19	46,805 0	47,954 7	55,656 9	28,464 2	37,838 13	51,902 15	17,600 13	20,644 1	9,998 16	4,968 1*

Despatches of rice from all Calcutta, including Kidderpore Docks and Howrah, to Stations on and the East Indian Railway from 1st January to 30th November 1897.

Date.	Jan-ary.	Febr-ary.	March.	April.	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Deca-ber
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons
1st	—	912	735	1,981	857	1,347	1,302	1,668	941	483	456	...
2nd	—	1,035	774	1,212	2,609	1,073	1,297	1,077	576	486	283	...
3rd	—	992	1,579	2,283	1,945	1,371	1,363	942	573	955	852	...
4th	—	825	1,326	1,385	1,932	1,830	1,086	923	466	479	736	...
5th	—	438	1,360	1,405	2,079	968	1,571	1,374	—	381	291	...
6th	—	590	2,077	1,965	1,610	1,980	1,321	1,437	518	709	464	...
7th	—	2,305	1,744	1,788	1,240	1,087	1,234	1,333	583	582	413	...
8th	—	1,002	2,091	1,194	1,213	1,433	1,227	1,422	639	666	318	...
9th	—	1,362	1,661	1,506	1,855	1,503	1,796	1,513	423	651	264	...
10th	—	1,374	1,471	1,910	1,446	1,653	1,451	1,534	360	503	240	...
11th	—	1,623	951	1,473	1,426	1,561	1,656	1,488	233	453	294	...
12th	867	1,312	1,153	1,721	1,590	754	1,403	1,642	198	698	390	...
13th	1,013	365	1,231	1,749	1,716	2,032	1,539	1,585	346	714	210	...
14th	1,021	1,445	1,901	1,433	1,904	1,615	1,278	1,764	397	714	333	...
15th	249	338	1,360	1,188	1,360	1,572	1,092	1,378	445	428	411	...
16th	525	2,363	1,776	1,261	3,329	786	1,356	1,051	881	455	299	...
17th	511	926	1,531	1,151	1,679	1,472	1,548	1,194	383	346	258	...
18th	825	1,427	1,585	761	1,702	1,100	1,124	900	410	402	285	...
19th	801	1,097	1,405	1,297	1,694	1,032	1,373	868	517	260	50	...
20th	680	1,810	1,179	1,223	1,097	—	934	883	672	652	100	...
21st	546	1,840	1,649	1,372	1,613	823	1,199	1,159	534	564	112	...
22nd	180	1,894	2,019	1,414	1,468	1,819	1,506	1,215	858	550	...	...
23rd	356	1,707	1,941	1,194	1,613	1,463	1,351	1,889	511	467	...	...
24th	502	1,687	1,095	1,484	3,278	1,472	1,345	749	467	703	...	...
25th	1,482	1,709	1,209	1,413	1,031	978	1,629	873	677	597	...	...
26th	1,586	1,978	2,037	1,319	1,264	768	1,317	1,168	361	364	...	...
27th	1,930	1,470	1,588	1,547	1,644	1,006	1,307	1,190	348	449	...	...
28th	1,597	1,149	1,488	1,745	1,854	1,013	1,681	1,263	328	540	...	...
29th	1,798	—	1,892	1,871	634	1,343	1,542	1,081	260	701	...	...
30th	1,529	—	1,531	1,274	1,824	1,884	1,468	1,170	357	653	...	...
31st	1,216	—	1,543	—	1,100	—	817	873	—	452	...	...
Total	19,215	36,915	46,282	44,530	51,671	38,988	42,418	37,606	13,767	16,464	6,759	...

It has been stated that in the event of India requiring large imports of grain from America or Europe, European firms at the ports would find more difficulty in engaging in such import trade than in the case of grain

export trade; that is to say, the reversal of the ordinary process of trade would be accompanied by special risks and difficulties. Is this so? The idea is that European firms here are accustomed to export grain from India but are

not accustomed to import.—We do both. If you refer to the despatch of grain up-country, I don't think you will get many European firms to do that.

Not many would import at their own risk?—I don't see why they should not do so.

In a case of real necessity they would?—I think so, but of course there would be much time lost.

Under those circumstances, do you think they would take the risk?—It is a difficult thing to say what some firms would do.

If the last monsoon had failed in Bengal, I suppose prices would have gone immensely high?—It is difficult to say. If anything Burma has bigger crops this year than last year, and I don't know what they are going to do with the rice. The famine last year helped them out of a large quantity.

You think an immense amount of grain would have come in from those countries, Burma, Siam, etc.?—Yes.

Still the amount received would not compensate for the loss?—I don't know what the figures are exactly. Burma could have given 600,000 tons last year and could do the same this year.

(Dr. Richardson).—They could not consume this rice at once?—No, but there is the old crop there also.

(President).—Supposing Government had given a bounty on imports with a view to reduce prices, what do you think the effect would have been?—They did do something like that.

Not exactly; they gave a bounty in a few places up-country; I mean a bounty on import?—I don't think it would have done any good to the Europeans, but every native would import a little.

Would the trade have thought it an interference?—No, I don't think so.

Would it have had the effect of raising prices abroad against India on countries hearing that Government was giving a bounty?—Yes. The Bengal Government was anxious that my firm should start business in Behar and other places and sell there; they promised to give us all the assistance they could. But I could not see my way to doing it and retailing; in a large town it would be all right but in the interior there would be too many risks.

The collection of money would have been difficult?—

Yes. We took a godown here in Calcutta and had a European in charge; the grain was weighed out and sold at once.

In large amounts?—No, generally so many wagons a day.

The men bought it to send up-country?—Yes.

You have no business up-country?—None.

(Mr. Holderness).—Were the stocks in Burma nearly exhausted last September?—No, a good deal could have come if we wanted it.

Could we have got some from Siam?—Yes.

If the monsoon had failed we could not have counted on the new crop?—No.

How much could we have got from Burma in September 1897?—As far as I can make out 150,000 tons were available for export, but I cannot say if that is correct, there must have been stocks everywhere.

During the late famine the Government did not interfere with the grain trade: do you think that was a wise policy?—Very wise.

If the Government had bought, what effect would it have had on private trade?—It depends upon the quantity that Government would buy; the rumours of Government buying would have had the effect of steadying prices. There was a persistent rumour in September 1897, that Government would buy 25,000 tons of rice, and we telegraphed to Simla about it.

What was the effect of that on prices in Rangoon?—Practically nothing, because everybody connected with the business found out that there was no truth in it.

If there had been any truth in it, it would have sent prices up?—Yes.

That might have discouraged private import?—Yes, to a certain extent.

(Dr. Richardson).—Are the risks in sending grain to the mofussil so great as to discourage trade?—No, there is only loss in weight during transit.

Is that due to railway mismanagement?—No, to changing hands two or three times.

(Mr. Holderness).—Those traders who bought from you, were they up-country dealers or Calcutta dealers?—Chiefly Marwaris of Calcutta with firms up-country. They also imported direct from Rangoon.

Mr. A. C. Adams.

20th Jan. 1898.

Babu PROBODH CHANDRA CHAUDRI, of Messrs. Dutt and Mittra, Produce Brokers, called in and examined.

(President).—Your firm of Messrs. Dutt and Mittra does a large business in grain?—Yes, as grain brokers.

In exporting it generally?—Yes.

In ordinary years there is no import of rice and wheat into Calcutta from foreign countries?—No.

How has the export of food-grains been affected by the famine and scarcity?—Prices rose very high, so it fell off. People were consuming the stocks of previous years.

How was the import of grain affected by the scarcity? It increased; there was rice from Burma and wheat from California.

Did you import any wheat?—No, we did not.

Did you import rice from Burma?—No.

Do you think that in recent years there has been a permanent rise in the prices of food-grains in India?—Yes, for the last three or four years there has been a great rise.

Any permanent sort of rise?—I do not think so.

You do not think the fall in the value of the rupee has had any effect on grain prices?—Yes, it had an effect last September and October; the trade was at a standstill when exchange was high.

Was there much speculation when prices went up high? Not much in food-grains, only in sugar.

Why?—Because everybody feared that prices, which were very high, might go down again.

Was it a general impression in the country that stocks were low all over the country, or that they were full and that prices would go down?—The idea was that if the rains were unfavourable prices might go up.

The population of the country keeps increasing quickly; do you think that produce goes on increasing in an equal degree?—I do not think so.

Then the surplus available for storage on export must be getting less?—Yes.

What made prices go up suddenly all over India as they did in the autumn of 1896?—Short crops.

Do you think it was a reasonable rise?—It was partly reasonable and partly due to panic.

Was there any combination or ring among grain-dealers to keep prices high?—Yes, there was.

In the market generally?—No, in the Calcutta market.

How was it formed?—The dealers said that they would sell things daily at a fixed rate.

They simply followed one another?—Yes.

It did not last long?—No.

How is it that all over the country prices got even so quickly; did the men consult one another?—They got information from the growing districts and the chief importers.

You are brokers, not importers?—We are brokers.

As regards the grain imported from Burma, who took it up-country?—The agents of the up-country firms. There are agents here.

Is there much risk in sending grain up; risk of loss in the train?—There is a loss of weight.

What is the common standard of loss?—About half a pound a maund. But allowance is made up to a couple

Babu P. C. Chaudri.

20th Jan. 1898.

Babu P. C. Chaudri. of pounds a maund. That is the customary allowance for shrinkage and loss of weight.

20th Jan. 1898. Is the actual loss much higher?—No, usually less. I am speaking of food-grains.

Supposing Government had bought grain from Burma, what would have been the effect on the high prices? Would private dealers have gone on buying all the same?—I cannot tell you.

(*Mr. Holderness*).—Have you any opinion as to whether Government ought to interfere with the grain trade in a year of famine?—I have none.

You do not know whether it would be a good or bad thing?—It is certainly not bad; it might be good.

Have you any idea as to what amount of grain is stored in Bengal?—In the Calcutta market about 100 lakhs of maunds of rice are stored.

Are there large quantities of rice stored in the mofussil?—I do not know.

Do you know whether in the famine, silver jewellery was sold much by the people?—I have not heard.

At the Imperial Secretariat Building, Calcutta.

THIRD DAY.

Tuesday, 25th January 1898.

PRESENT :

SIR J. B. LYALL, G.C.I.E., K.C.S.I. (PRESIDENT).

SURGEON-COLONEL J. RICHARDSON.
MR. T. W. HOLDERNESS, C.S.I.

MR. T. HIGHAM, C.I.E.

RAI BAHADUR B. K. BOSE, C.I.E.

MR. H. J. McINTOSH, *Secretary.*

BABU GANGA PERSAD, of Messrs Hurmukh Rai and Govind Ram, called in and examined.

(*The witness gave his evidence in the vernacular.*)

Babu Ganga Persad. I belong to the firm of Hurmukh Rai and Govind Ram. We do business in grain in Calcutta and other large towns. The head place of business is in the Bulandshahr District.

25th Jan. 1898.

The rise in prices in September and October was general all over India and was due to the failure of the rains. I think the rise was reasonable, and was not due to panic. The merchants received communication by letter and telegram of the state of affairs in different parts of India, and so prices quickly rose everywhere. There was no direct consultation among dealers with a view to raising prices.

A great deal of Rangoon rice was imported. But for the Rangoon rice prices would have been higher than they actually were. The Rangoon rice found its way up-country as far as the Punjab, and was the cheapest rice obtainable in the market for some time. It was much appreciated. Both European and Native firms imported Rangoon rice.

At the end of 1896 stocks were generally not very large in the district of Bulandshahr; the zemindars had considerable stocks, and so had a number of the cultivators. Those cultivators kept what they required for consumption, and sold the rest. Some of them no doubt made a very fair profit on their crops. Among bunnias some made profits, while others suffered a loss. I do not think, on the whole, that the profits were extraordinarily large.

The general rise in prices was reasonable, because the rains had failed and because stocks were low. Prices fell a little when news was received of the arrival of four or

five cargoes of grain from America. People expected a large export from America and so prices fell. At that time there was little difference between prices in Calcutta and in Bulandshahr. Indeed, prices varied very little throughout India, little more than the expense of the Railway journey.

I am certainly of opinion that the habit of storing food-grains in pits or other receptacles has diminished among grain dealers. It has fallen off very much during the last 40 years. No doubt the extension of the Railway accounts for this falling off.

I think there was very little difference between the prices at which wholesale dealings were transacted between grain dealers and ordinary retail prices.

As I was in Calcutta, I do not quite know what the wages of labourers, artizans, or servants went to because of the high prices, but I believe wages went down a little. People were hard-up, and were willing to work for small wages. I am inclined to think that in the last 20 years there has been a rise in the prices of food-grains, but it is difficult to say if this rise is a permanent one. The export of grain may have had something to do with raising prices, but I am not sure. I do not think that the tightness of the money market has had anything to do with raising prices.

The import of grain from America stopped after four or five cargoes had arrived, because prices fell and there was not sufficient profit left to encourage the trade. Some American maize was imported, but people did not like it.

KEWAL CHAND, Calcutta Agent of Raja Seth Lachman Das, called in and examined.

(*The witness gave his evidence in the vernacular.*)

Kewal Chand.

25th Jan. 1898.

I am the Calcutta agent of Raja Seth Lachman Das of Muttra, who has an extensive grain dealing business throughout India.

I recollect the great rise in prices in September and October 1896. The rise occurred throughout the whole of India, and prices tended to reach one common level throughout India. The only reason for the rise in prices was that the rains had failed, and that people had become very anxious. It must be remembered that in various parts of India there had been indifferent crops for three or four years previous and that in 1896 there was a general failure of crops everywhere. Therefore when the rains stopped people quickly recognised that there would be a famine and so prices rose at once. Those who had grain at home kept it as a provision for the future, and did not sell. The rise in prices was, I think, quite a reasonable rise, and was not due to unreasonable panic.

One thing that makes prices so level throughout India is the extension of the railway system. In the late famine prices were much more level than in former famines owing to this cause. In the famine of 1878 '79, was much movement of grain because the crops were good in half of India, while in the other half of India they failed. In the late famine crops were fairly bad throughout India, and therefore the movement of grain in this famine was less than what would have been expected.

As I said before the rise in prices was reasonable, and but for the Rangoon rice prices would have been still higher. Stocks were generally small, specially in those parts where for three or four years crops have been poor. I do not think the population of India is increasing faster than the means of subsistence. Anyhow in a good year the crops are more than sufficient to feed the people. I do not think that the increase in the population has anything to do with the high prices that have occurred.

BISRAJ, Grain Dealer, called in and examined.

(The witness gave his evidence in the vernacular.)

I am a grain-dealer doing business in Calcutta. I was in Calcutta throughout the whole period of the late famine, but I have agents in many parts of India who carry on my business. My original home is in Jeypur. I have lived in Calcutta for the last 28 or 30 years.

The only reason for the great rise in prices in September and October 1896 was the great failure of the rains; there was no other cause which raised prices. In the case of most grains the prices were very level throughout India generally; in the case of rice, however, the price was lower in and about Calcutta than up-country.

My firm imported some Burma rice. But for the importation of Burma rice prices would have gone up much higher than they did. Had Government itself imported grain, the result would have been that prices would

have been lowered a little. When news was received that grain had been imported from America, prices at once fell a little, and the same would happen if Government imported.

I am unable to say whether wages of labourers, artisans or servants went up in consequence of the rise of prices in India generally, but I know that in Calcutta a few servants received higher wages, while the ordinary coolies received smaller wages than usual. There was great demand for employment among the coolies, and so they were willing to work for smaller wages than usual.

I believe that the people did sell a great deal of jewellery and ornaments; I believe that more was sold in the last famine than in former famines; my general information is that a great deal was sold.

Bijraj.
25th Jan.
1898.

GURDIYAL, Grain Dealer, called in and examined.

(The witness gave his evidence in the vernacular.)

I am a grain-dealer in Calcutta. I came originally from Allahabad. I have shops at Calcutta, Bhagulpore, Bahraich and Allahabad. I also do a considerable business on commission.

The rise in prices in September and October 1896 was solely attributable to the fact that the rains had failed. The people were anxious, and naturally prices rose very high. The rise in prices was not unreasonably great, especially when it is remembered that food-stocks were not very large. Stocks in Bengal were fairly large, larger than in other parts of India, while in the Central Provinces they were very small; in the Central Provinces there had

been bad harvests for three or four years, and so stocks were very small.

The trade in Burma rice was, on the whole, a profitable trade, but there were cases in which losses were incurred. Profits, as a rule, were small. I do not think any big profits were made in Burma rice. But no doubt, in the grain trade generally, some big fortunes were made.

My memory does not go back far enough to enable me to say that there has been a permanent rise in the prices of food-grains of late years. But I think prices have risen. I am not able to say that the rise has been very great, or that it is permanent.

Gurdiyal.
25th Jan.
1898.

At the Additional Commissioner's Office, Bankipur.

FOURTH DAY.

Thursday, 27th January 1898.

PRESENT:

MR. T. W. HOLDBENESS, C.S.I., (PRESIDING).

URGEON-COLONEL J. RICHARDSON.
MR. T. HIGHAM, C.I.E.

RAJ BAHADUR B. K. BOSE, C.I.E.

MR. J. A. BOURDILLON, C.S.I.—(Temporary Member for Bengal.)

MR. H. J. MCINTOSH, Secretary.

MR. C. A. MILLS, Inspector of Works, Western Circle, Doranda, called in and examined.

I put in a written statement of evidence.

Para. I. From paragraph I it appears that Mr. Higham is dealing with the case of D class labour only which is paid what is known as the minimum wage which is again intermediate between maximum and penal. In Behar the diggers' task for this class of labour would be from 100 to 160 cubic feet in light soil, the full task being 200 feet for a B class digger. Leaving the digger's task out of consideration, and coming to the carriers I am of the following opinion.

Referring to paragraph 3 of Mr. Higham's Appendix, it is quite clear that the "reduced lead" is a just and fair settlement of the difficulty we have experienced during the recent famine, of adjusting the proportion of diggers and carriers, and in the case of D class labour a liberal allowance should be made. It is a fact that the labour in Behar (so far as Public Works Department's works are concerned) was almost all B class, and there we went approximately on the principle of 1 carrier to every 3 feet of lift, and 60 feet of lead, and under these conditions we were able to exact the full task of 200 cubic feet per digger in soft soil. But in the case of D class labour the conditions are of course different, and it is only right and fair that some consideration should be made for the "initial effort." One thing is quite clear from Mr. Higham's appendix, and that is that the task in Bengal was severe, but as the labourer was not emaciated, we had no difficulty in exacting it. The ratio of 1 foot of lift to 12 ft. of lead seems to me fair, but I prefer the Bengal system, when B class labour is employed, because it is a

matter of experience that the people are capable of doing the task without losing their health.

It would probably be advisable to have the formula given in paragraph 5 of the appendix calculated out for all varying conditions of lead and lift, as in practice, the class of men who acted as officers in charge in Bengal, are not very intelligent, and they would be sure to make mistakes if they had to make these calculations themselves. These tables might be worked out for both B and D class.

I certainly think the famine task of 10,000 basket-feet, fixed by Mr. Higham, is sufficient for D class labour, but on the other hand 12,500 basket-feet is known by experience to be not too high for B class. The task tables prepared by Mr. Glass were worked to carefully in tank work, and, allowing for the initial effort, the result is an outturn of 13,072 basket-feet.

The outturn on road-work was smaller, but this is due to the fact that the task of the carrier was lighter, owing to the lead and lift being comparatively small, and all that was expected was an outturn of 200 feet per digger. As a rule, the pits for road-work were only 1 foot deep, and the lead seldom exceeded 60 feet. In tanks, on the other hand, the lift amounted to from 12 to 14 feet of excavation, and the "bandhs" of the tanks were from 6 to 25 feet high. This, of course, entailed very much heavier work on the carrier, and as several of the larger tanks were about 1,000' x 500', the lead was also very tiring to the carriers. But, as said above, there was no difficulty in getting the

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Mr. C. A. Mills. task laid down in Mr. Glass' tables carried out, and the people were in good health at the end of the famine.

27th Jan. 1898. (*President*).—Will you tell us what position you held during the famine?—Superintendent of Famine Relief Works, Behar, and afterwards Superintendent, 1st Circle, Behar.

You were working in Behar during the whole time?—Yes.

Would you kindly turn to the questions No. 50 *et seq.* Can you state the number of relief works charges under the Public Works Department and civil officers respectively, at the time when attendance on relief works was at the maximum under each of the following classes :—

- (1) Roads.
- (2) Village-tanks.
- (3) Impounding reservoirs.
- (4) Canals.
- (5) Railways.
- (6) Tram-roads.
- (7) Miscellaneous works.

Yes, I am in a position to answer. I submit a statement* giving the information complete, *i.e.*, all information complete, for all works, for each division, with the exception of the Sakri-Jainagar Railway. Of course it must be understood that my information refers solely to Public Works Department works.

These are Public Works only?—Yes.

Will you look at question 51? Will this statement give the totals with regard to new roads as Famine Relief Works?—With regard to improved roads.

There were no new roads?—No new roads, except of short lengths.

Does this give the length of roads?—No, it does not.

What was the total length in miles of new roads constructed as Famine Relief Works—(1) Un-metalled, (2) metalled? As a matter of fact we did not construct any new roads. We only raised and improved old roads.

What do you estimate as the average number of day units of labour that can be employed per mile of each class of road, the work in the case of (ii) including the collection and consolidation of metalling, and collection of a reserve supply of 5 years?—I can scarcely give a reply to that question, as we did not collect any metal or carry out any consolidation.

Can you give us an estimate of the average number of labourers that can be employed on each class of road?—One thousand units per mile on unmetalled roads. But it all depends on the height of the bank.

Do you think that all the roads constructed as relief works will be of permanent service to the community, and that they will be effectively maintained in future, or that they will probably be abandoned as soon as they fall into disrepair?—Those constructed were only raised and improved, and these will be useful.

I understand there was some construction of new roads?—No. No new roads were constructed except some of very short lengths, which are quite insignificant.

Will the maintenance of these improved roads involve the District Boards in greatly increased expenditure?—I do not think so.

If the roads now constructed are regularly maintained, do you consider that there will still be room for new roads, should it be necessary a few years hence, to open relief works; and if so, what length of new roads could be proposed in the districts principally affected in the late famine?—There is still room. For instance there is a large number of fifth class and fourth class roads, which might be raised to a higher class, if there is necessity to open relief works again.

What is a fourth class road?—They are village tracks; in fact, fourth and fifth class may be classed together. There is a large mileage in all the Behar districts of such village roads, that is of the fourth and fifth classes, which might be improved, if there is necessity.

What is your opinion of the value of village tanks as a form of relief work—(I) as a means of employment of relief labour, (II) as a means of permanently benefiting the villages in which they are constructed?—It is the best form of relief.

As a means of employment?—Yes. Because the labour is all condensed and you can manage it better. But there are two ways of looking at it. If you look at it

from the point of view of irrigation, I do not think they are of much value. On the other hand, they are useful because they give water to the cattle, and so on. As irrigation works, they are not of much use.

Are they all likely to retain their water?—That I cannot say.

They may have to silt up first?—They probably will have to silt up somewhat. I should think they certainly will retain water because we went down to water level.

They can only irrigate a very slight area?—Yes.

If you go down to water level does that mean spring level?—Yes, spring level.

What is the total number of village tanks that have been excavated, deepened or enlarged as relief works under Public Works or civil agency, and the approximate number of day units employed?—I would refer you to my final report for this information.

What was the average number of workers for whom employment could daily be provided in a satisfactory way on an ordinary village tank?—Can you make any suggestion for securing strict supervision over small, and necessarily scattered tank-works, or for preventing the whole population of the village from applying for work on the tank because it is at their doors?—I should say that not more than 5,000 persons can be satisfactorily employed on a single tank, but everything depends on the size of the tank of course.

Has the number of possible village tanks been exhausted by the recent famine works, or can we rely upon again being able to employ large numbers on such works on the recurrence of famine, say within 20 years?—There is ample scope for constructing tanks; the only question is whether you cannot do more useful works.

They are not exhausted in any case?—No, they are not exhausted. There are a great many sites where tanks might be required, and they might be very useful. I people all ask for tanks; that is the one thing they ask for; the one thing they want.

Reserving your opinion as to the utility compared with other works, you say there is room for many tanks?—Yes.

Is it a fact that they want more?—Yes, the vill want more.

There are a large number of tanks in Durbhu. Can you tell us why they want more?—I think for village purposes, for cattle, for bathing and so on; for village convenience.

But then, cattle exist everywhere and why should there be a special demand in Durbhunga?—Because it is a very dry soil in that district and there are few wells.

(*Mr. Higham*).—What irrigation works, other than impounding reservoirs, have been constructed as relief works during the late famine, and what has been the approximate expenditure incurred on them as relief works?—We constructed a portion of the Baghmata Canal, a cut in the Baya nala, the Arizpur pain and several other pains. These are all in the first circle. And in Champaran we constructed the Tribeni Canal, the Dakka Canal and a number of small pains. Of these, the Baya cut and the pains were completely finished, and the Dakka Canal was practically completed. The other projects were not completed. The Baghmata Canal was not completed for engineering reasons, and the Tribeni Canal was too large a work to be completed. By completed, I mean that the earth-work was finished. If we had commenced these works sooner, no doubt we could have completed them all. We began all these irrigation works about January or February, while tanks and other works were begun about December. The Public Works Department staff was not got together till February.

What expenditure will be required on them, on sub-heads of construction such as land, mason, works, etc., that are of little use for purposes of relief works before the work can be completed and made available for irrigation?—I am afraid I cannot tell you that, but I can tell you where you can get the information. Mr. Butler has been framing the estimates.

The irrigating capacity of the canals will be determined by the amount of water available?—Yes, in the case of the Ganduck River, that is unlimited; in the case of the Dakka canal we will have a fair supply unless it is cut off in Nepal, and in the case of the Baghmata Canal, I should think we should have no difficulty in getting water.

* Not printed.

Sufficient to run the canal in full capacity?—Yes.

What will be the area commanded by these canals?—The Baghmata Canal will command from 150 to 200 square miles; the Tribeni Canal will command the country from the line of the canal to the Sikra river, that is, about 400 square miles, and the Dakka Canal will command about 100 square miles.

Can you give us a rough estimate of the area likely to be irrigated?—I mean of the area commanded, could you give us the number of acres likely to be irrigated?—About 75 per cent. of the commanded area would probably be irrigated.

Do you know of any irrigation projects that can be usefully investigated with the object of providing employment for relief labour in future famines, and with the prospect that the cost of maintenance will be covered by an increase in the revenue that may be attributable, either directly or indirectly, to the works proposed?—Yes, the Tribeni Canal. I mean the full scheme, and not only the part done: secondly, the completion and development of the Baghmata Canal. I think that some effort might be made to push the Baghmata Canal as far as the end of the district: and thirdly, I think an attempt might be made to see if any of the hill streams coming down from Nepal, into the Darbhanga district, could not be utilized. But these would require to be carefully investigated.

And all these schemes, you think would cover the expenses?—I think they would cover expenses in a famine year, but not in an ordinary year with a normal rainfall. They certainly would not pay continuously. They would only pay when the rainfall was short.

That is to say, by saving crops?—By saving crops.

Under what arrangements with the Railway administration interested have feeder railways or tramways been undertaken as relief works?—The arrangements made were with the Agent of the Bengal and North-Western Railway. We undertook to do the earth-work for him on two lines.

What was the arrangement?—The Railway gave us the land-plans and the survey. Then we commenced work and completed it, and then asked them to take the line over.

Generally, do you think it would be possible, after careful investigation by competent officers, to prepare a programme of large and useful public works that might be put in hand in future famines in preference to petty works, such as have been carried out during the recent famine?—I think it is possible. It is one of the strongest recommendations I have made in my report and, in fact, I think it is absolutely essential to do so.

(President).—You deliberately prefer that to petty works?—Yes.

Would you call a tank employing from 500 to 1,000 men, a petty work?—No, a large work; any work employing 1,000 men I would call a large work. What I practically recommended is this, that it is far better to have schemes drawn out for large works, before any necessity arises; after that, when small works become necessary in any village, they can easily be started. I think it is absolutely necessary to have large schemes drawn up.

What are the provisions of the Provincial Famine Code regarding the maintenance of a programme in each district of famine relief works, with sanctioned plans and estimates? Has the Code been in practice observed, and were plans and estimates for the works entered in the district programmes ready prepared when distress appeared? If plans and estimates were not ready, what was the reason?—We certainly have programmes, and the provisions of the Code have in practice been observed. The Code certainly says that a programme ought to be prepared, and kept in readiness in case of emergency. But we have been very unfortunate. Although a large number of schemes have been drawn up, these were mostly all in parts where they were not required last year. Where distress actually occurred there were no large schemes ready.

The question also asks whether plans and estimates were prepared?—These are submitted every year.

When these works are entered into the programme, are the details, plans and estimates ready?—Yes.

In the case of the Tribeni and the Dakka canals were these ready?—No, they were not ready. The programmes were not complete.

It so happened that the programmes for the districts of Muzaffarpur and Champaran did not cover the distressed area?—The distressed area was in the north, just under the hills, and the actual area which these plans covered was in the southern part of the district, where there was no distress.

Was there any reason for considering that there would be no distress in the north?—That I am unable to say. But in connection with this matter, I would invite attention to paragraph 18 of my final report which expresses my views clearly. I think that if the suggestions contained in that paragraph are adopted, no difficulty will be experienced in future.

(Dr. Richardson).—Are the tracts of country which will be irrigated by the Tribeni and Baghmata canals very thickly populated?—The Ramnagar tract, which will be commanded by the Tribeni Canal, is very thinly populated. A canal will probably result in a considerable increase of population there. The Sitamahi Sub-division through which the Baghmata Canal passes is very thickly populated.

(Mr. Bourdillon).—Is it not the fact that the Tribeni Canal ought to make that tract more productive?—Yes, certainly.

It will improve the health of that tract?—Yes, I think it will improve the health.

(Mr. Bose).—Do you accept the definition of a small work as given in Section 53 of the Bengal Famine Code at all?—I should call a work employing a thousand persons a large work.

Practically, you accept that definition?—I accept it.

Would you kindly say what class of people your relief workers were?—Mostly agricultural.

You mean not agricultural labourers, but actual cultivators?—The great majority were agricultural labourers and not *raiya*s; only a small percentage of the industrial class came on works; the majority of the relief workers were agricultural labourers.

But they belong to the actual class who generally make their living by daily labour?—A great many were agriculturists.

(Mr. Bourdillon).—You mean people who are accustomed to their daily labour, you mean agricultural labourers?—I mean agricultural labourers.

(Mr. Bose).—In one province it was represented that the rate of wages given to the relief workers was not enough to sustain their condition. Was that your experience; or do you think it was enough to sustain them?—It was quite sufficient.

(President).—What, in your opinion, is the greatest distance at which the distressed inhabitants of a village may be induced to attend relief works—(a) when they return every night to their villages; (b) when accommodation is provided on the relief works?—When they return to their villages, I do not think it should be more than 2½ miles. When accommodation is provided on the Relief Works, then anything up to 10 miles. A relief work should cover 5 miles square, or if, accommodation is provided, 10 miles.

(Mr. Higham).—Why won't they come more than 2½ miles?—We did not find it necessary to take them more than 2 miles, and it seems a long way to drive them, in my opinion.

Do you think it would be practicable to withhold relief from all fairly able-bodied labourers, who refused to attend relief works at the distances stated in reply to the last question?—Yes, if they are able-bodied, I think you have done enough if you give a man a work within 2½ miles of his home.

Would you recommend conveying relief labourers long distances of over 100 miles by rail or steamer to any large public works on which there is a strong demand for labour, or in which their labour could be very usefully employed, in preference to employing them near to their own homes on petty works of little use to any one, and the construction of which would never be contemplated, except for the purpose of affording employment for distressed labourers?—Yes, I think so, with their own consent.

You favour a system of drafting of volunteers to large public works?—Yes, I would recommend that.

You recommend the draft of volunteers only?—I would not draft a man unless he agreed to it.

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Subject to people's consent could such drafting be practicable? Would they go?—They would go if you induce them by offering piece-work. I do not think they would go for task-work only.

(President).—With reference to question 74, I understand that in Bengal compulsory residence has been the exception?—Yes; we only found it necessary to erect huts for a few people who came from a long distance.

Are you in favour of making residence obligatory, or of indirectly inducing it by concentrating the works? Have you any evidence that when such a test is not enforced, the relief works attract many persons not actually requiring relief? Do you consider that a high task and low rate of wage are in themselves sufficient tests?—No, I do not think so. In my opinion, a high, or rather a fair task and a low wage is a sufficient test. If these conditions are enforced, people not really in need of relief will not be attracted to the works. Even if residence is not obligatory they will not come. My experience was that people left the works as soon as they were able to do so.

Is residence on the works so distasteful to the people that they will undergo extreme privation before they submit to it? Can you point to any instances in which this feeling has prevented relief, offered under condition of residence, from being effectual? Or any in which it has passed away or become less intense after a short trial?—I think so. But I cannot point to instances.

If famine were widespread in the province, would the disposable establishments be large enough to supervise works so numerous and so arranged as to allow the majority of the workers to return daily to their homes?—It could be arranged. I would draw your attention to paragraph 15 of my final report which deals with this matter.

You think if the suggestions contained in paragraph 15 of your report were adopted there would be no difficulty?—None.

The scheme of works you contemplate, that is to say that there should be a work for every $2\frac{1}{2}$ miles, does it contemplate that all the works should be under Public Works? No, I do not think so.

And you could not arrange it?—It could be arranged.

Then you think the Public Works Department could take up all the relief works?—Yes, all the relief works.

Do you contemplate that all the relief works should be under the Public Works Department or not?—It could be extended to the Public Works Department, if you had a regular system.

Do you consider the objections taken by the Famine Commission (paragraph 133) to piece-work as the predominant form of relief on works are overstated, or can be removed or lessened by administrative expedients? Or that they are on the whole less important than those which in your experience may be urged against task work? I think the arguments, given in paragraph 26 of Mr. Higham's Report answer the objections made by the Famine Commission. If piece-work were introduced generally, I think the number of relief workers would be reduced, the labour wage would be slightly higher, and, in consequence of that, the numbers of recipients of gratuitous relief would also be reduced.

What arrangements would you recommend on works, carried out under the piece-work system, for labourers who might be too weak or incompetent to earn subsistence wages at the rates offered, but are nevertheless not sufficiently helpless to be proper recipients of gratuitous relief, either on the works or in their own villages? I invite your attention to paragraph 12 of the letter No. 4128, dated 1st October 1897, in my report at page 89.

Would you propose any arrangements limiting the amounts to be earned on piece-work by expert and able-bodied labourers, who might be able to execute far higher tasks than those assumed as the basis for the piece-work rates? If so, state what certain terms you would propose?—I do not think so. I think it would be prejudicial, as being too complicated. If you make certain terms with one class of labour and again with another class of labour, it complicates arrangements. It is sure to have this effect.

What is the size of the party to which you would make single payments for the work done, *e. g.*, in the case of earth-work, how many diggers, with their own complement of carriers, would you put into one gang, or what would be the average number of diggers and carriers to-

gather forming a gang, and to whom a single payment should be made?—From 60 to 100.

(Mr. Bourdillon).—Single payment?—Yes, single payment.

(President).—In piece-work you pay to the head of the gang and in task-work to the individual?—In piece-work I pay to the head of the gang, and in task-work to the individual, as far as possible.

Are you of opinion that if payment for work done is made to the head of such a gang, as is referred to in the previous question, the amount paid will fairly be distributed by him among the members of the gang? Have complaints of unequal or unfair distribution been common when this system has been adopted?—Yes, in task-work, but not in piece-work.

Has there been any instance of speculation in task-work?—Yes, there has been much speculation. The man who generally takes the money is the gang mohurrir. The speculators generally are the gang mohurrirs.

Can you give any idea of the reduction that may be made, both in numbers and cost of special establishment, by the substitution of piece-work for task-work?—You can considerably reduce every branch of establishment. The gang mohurrir disappears and the clerical establishment is much reduced.

What is, in your opinion, the most convenient system of classifying relief labourers, when employed on task-work?—I would only have B and D classes. And as to children, I would simply classify them by age.

Do you distinguish between men and women?—Yes.

And as regards children?—Children are paid by age.

Do you simply classify them by age?—Yes, by age.

What wage would you propose for each class in terms of the grain staple in general consumption by the classes from which labourers are drawn, expressed in *chattaks*?—The present grain equivalents are quite sufficient.

Would you propose a different task and wage for men and women within the same class?—If the woman can do the same task as a man, I would pay her the same wage.

What do you consider the minimum age at which children should be employed as workers?—Six years of age.

Have you been adopting that?—We have been working much below that.

What penalties would you propose for labourers who fail to perform the task set them, and how would you enforce them?—I would not inflict any penalty at all. I should simply say that the system of payment by results should be adopted. If a system of limited piece-work, such as Mr. Blackwood's system, is adopted, no penalty is necessary, because short work carries its own punishment. I am opposed to a minimum or a penal wage, because I consider it gives too much power into the hands of the officer in charge.

Have considerable bodies of relief workers been on the minimum or D wage for a continuous period? Has it resulted in enfeebled health?—No; large numbers were found on our works.

Are you in favour of allowing all labourers to earn something in addition to the normal wage proposed in your reply to question 12, on the performance of a task in excess of the normal?—I would, for task-work. I would give the Sunday wage on condition of attendance on Friday, Saturday and Monday. On piece-work, I would let the workers do as they like.

Do you consider it possible to introduce a standard task for all carriers, as suggested in paragraphs 9 and 10, and in Appendix 1 of Mr. Higham's report on the management of relief works?—I think it is quite possible.

Do you think that the formula proposed in Appendix 1 of Mr. Higham's report for determining a *reduced lead* in which allowance is made for the initial effort in each trip for the vertical lift and for the actual horizontal level, is one that may be generally accepted for the purpose of a measure of the work done by carriers. If not, what modification of the formula would you propose?—I think so.

Could you give us a note on questions 104 to 107?—Yes, I will do so.

What is, in your opinion, the best unit for task-work, that is, the size of the party to whom a given task is allotted and all the members of which should be liable to fine if the task is not performed?—The pit-gang, as described in my report; that is what we found most convenient.

Have you had experience in what has been called the modified intermediate system, and if so, do you consider it preferable to task-work under the system laid down in the North-Western Provinces Circular No. 18, dated 5th December 1896, or to piece-work in which payment is made to the head of a working party simply with reference to the quantity of work done, and without any reference whatever to the constitution of the party? If you consider this system preferable to the others, would you advocate its adoption on all relief works, whatever the degree of the distress? If you consider it inapplicable in districts in which the distress is very acute, please state your reasons?—Our system is practically the same.

In what proportion have the adult male workers stood to the women and children? Has it varied greatly in different districts and in the same districts at different periods? Has the proportion differed in the same district and at the same point of time on task-work and piece-work?—The exact figures are given in my final report. The proportion varied considerably.

Can you account for the great preponderance of women and children on the relief-works when these exceeded two-thirds of the whole number? Did the adult males find private employment at wages in excess of the family wage? If so, was it really necessary for the State to support their wives and children?—It was only at the end of the famine that the women and children exceeded two-thirds. The explanation was that the men went off to cultivate their fields.

If the relief workers were agricultural labourers and they were paid their wages for working in the fields, is not that wage sufficient for them and their families?—The wage was not enough, and therefore the women and men had to remain on the Government works.

Do you define the classes of relief works which in your opinion be most conveniently carried out by and Public Works officers respectively?—In my opinion, such classes of works as require professional supervision should be under the Public Works Department, and works, such as tanks, under civil officers. Large works should be under the Public Works Department and minor works under the Collector. Departmental work should be confined to the able-bodied labour. But for my views on this subject, and as to the relations between Civil and Public Works Department officers, I would refer to the Commission page 78 of my Final Report. I think the Commissioner should have absolute control, as laid down in the Code. The Collector should have authority to open or close works, to decide the wage to be paid, to inspect all works, to take up land and to decide in what order works should be undertaken. On the works themselves the Executive Engineer should be absolutely responsible for the actual work.

Do you think it desirable that any powers of control be reserved to the Collector in the case of works carried out under village officers before admitting new-comers to the works?—What was done in such cases with labourers presenting themselves without a *chalan*?—No, I do not think so.

What class or classes of men do you think most suitable as officers in charge of the relief work camp, it being assumed that the services of all available Public Works officers and subordinates are required for setting out and supervising the work, conducting and checking the measurements, etc., and on the general duties of inspection in control?—The best men I have had experience of in this famine are non-commissioned officers and privates of the regular army.

You consider these most suitable?—Most suitable, if properly educated.

Do you think that the officers of the Public Works Department, who are responsible for the execution and inspection of relief works, can or should also undertake the control of all other matters within the relief camp, such as the payment of labour, the conservancy arrangements, the management of kitchens, bazar arrangements, etc.?—Everything, except kitchens, and gratuitous relief.

You had no relief kitchens in connection with the works?—No.

Do you think it necessary or desirable that either the officers in charge of relief camps or the inspecting or controlling officers should be vested with Magisterial powers for the maintenance of order in the camp, and if so to what extent?—I would not give Magisterial powers to anybody below the rank of Assistant Engineer. Assistant Engineers might have the powers of 3rd class Magistrates.

Was there an essential difference between the systems of management adopted on works under Public Works and those under civil agency?—None, except in the matter of returns and accounts.

That is perhaps not essential. I mean is it an essential difference?—Yes, it is.

Do you think that ought to be altered in future?—Yes, the difference in accounts ought not to exist in future.

Do you consider that any of the works carried out by the civil officers might with advantage have been transferred to the Public Works Department, or *vice versa*, that any works were carried out by the Public Works Department that should have been left in the hands of the civil authorities?—I think some of the roads might have been transferred to the Public Works Department from civil agency. But the Public Works Department had not sufficient staff to do more than it actually did do.

Was it left with you to decide what works you would take over?—It was left with the Collector entirely. He gave his instructions what work to take up and we took it up accordingly; that was arranged mutually. We told him what we would be capable of undertaking.

(Mr. Bose).—At what intervals do you consider that the payments of wages should be made—(i) to labourers on task-work;—(ii) to those on piece-work?—Task-work daily. Piece-work twice a week.

In the case of task-work would you adopt the piece unit for payments or pay to the nearest piece worked out by the Ready Reckoner?—By piece. I would adopt the piece unit.

(President).—Do you recommend that payments should be made by independent cashiers or by the gang mohurrirs?—Not by gang mohurrirs; on task-work I would recommend individual payments, on piece-work through the mates.

Has it been the practice on any works to require a *chalan* from civil or village officers before admitting new-comers to the works and, if so, do you consider it a desirable practice?—What was done in such cases with labourers presenting themselves without a *chalan*?—I have no such experience. All who came were admitted, whether they had a *chalan* or not.

What are the maximum and minimum number of labourers that should form a single charge?—The maximum 5,000, and minimum 1,000.

What do you consider, as a result of your experience, may be considered a fair ratio to the value of the work done, if performed by ordinary labour at the ordinary rates of—

- (i) The payments actually made to the labourers employed, including the Sunday or rest-day wage;
- (ii) The total cost of the work, including relief to dependants and all incidental charges;

and support your opinion by statements showing the general results of all the operations under your charge?—In reply to this question, I would refer you to my final report and annexures. Taking the figures for one district (Mozuffarpore) I find that the actual results on the task (for labourers only) are nearly 100 per cent. The rate was lower than the usual district rate for earth-work. Including all special gangs, but excluding gratuitous relief, the outturn is about 75 per cent of the task, but taking, into consideration the lowness of the rate worked to, the ultimate result is about normal with what could have been carried out under ordinary conditions in any year. This opinion is subject to the usual allowance for lead and lift.

In Durbhanga the rates were somewhat higher, because the bulk of the work was tank-work, where the lead often amounted to 250-400 feet, and the lift to 15-25 feet.

Have you any suggestions to make on the question of Famine accounts and returns?—Nothing can be more simple than the system of accounts we had in the Public Works Department. The system will be found in pages 31 to 43 of my report. The only alteration I would suggest

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is to alter the term of compilation from 10 days to 7 days so as to fit in with the civil account system, and to make the unit a week instead of a month.

27th Jan. 1898. Did you receive any complaints from private employers of labour?—I received none.

What arrangements, if any, would you propose in future famines to prevent relief works attracting labour that would otherwise go to private employers. Would you trust to the piece-work system?—That will help to a certain extent.

Can you say if relief operations were assisted in any way by the employment offered by private employers

of all classes to able-bodied workers in their immediate neighbourhood, other than professional earth-workers? Are you aware whether any works were undertaken by them with this purpose which, but for the existence of distress, would have been postponed to a later date, or whether any special efforts were made or facilities afforded with the object of assisting in the relief of distress? Notably by the Maharaja of Durbhanga, and in some places by indigo planters.

Relief operations existed to a considerable extent?—Yes to a considerable extent. I think you might utilise the assistance of planters considerably.

MR. E. P. CHAPMAN, Collector of Saran, called in and examined.

Mr. E. P. Chapman.
I put in a written statement of evidence.

27th Jan. 1898. Note of Evidence on the points detailed in paragraph 4 of letter No. 42, dated the 12th January 1898, from the Indian Famine Commission.

I.—Departures from the prescriptions of the Bengal Famine Code, which have occurred in the province during the recent famine.

(a) FAMINE CODE, CHAPTER IV.

Section 30.—The relief circle was not conterminous with any territorial division made for the purpose of ordinary administration. The census circle was taken as the unit.

Section 31.—(i) The officer in charge of a relief circle was called a circle officer, and not an Inspector.

(ii) The selection of suitable cases for gratuitous relief was primarily made by the village punchayats. The punchayats' lists reached the circle officer through the thaus where copies of the lists were recorded. It was the circle officer's business to test these lists. I had constantly to check a tendency among the circle officers to accept the punchayats' list without enquiry. They did not recognise sufficiently that the final responsibility for selection rested with them.

(iii) The circle officers practically failed to organise any system of private charity, and as a matter of fact, circle officers were not employed until it had been decided that private charity was to be supplemented by Government relief.

(iv) No half-monthly reports were submitted by circle officers. They submitted weekly returns and monthly detailed bills.

(v) The circle officers had, in practice, no connection with relief works either in the way of suggesting what works could be undertaken, or in aiding in or supervising the execution of works already started.

Section 34.—The circle officer was supplied with money enough to cover one week's distribution. He submitted an abstract bill for reconpment, together with his weekly report. There was no possibility therefore of any difference between the figures in the two returns arising.

Sections 35 and 36.—Contractors were not appointed. The circle officer made his own arrangements locally.

Section 37.—The contractor was paid by the circle officer himself.

CHAPTER V.

Section 41.—The rule, that when distress begins, relief works should first be undertaken, was abandoned after a very short trial. It was found that whenever a relief work was started the work was crowded with persons, chiefly women and children, from the neighbouring villages, most of whom were not in fact destitute. The distance test, it was decided not to seriously attempt, as the majority of able-bodied males had emigrated, leaving their families in charge of single males. Wherever therefore serious distress was proved to the satisfaction of the Collector, gratuitous relief was organized without having recourse first to the relief work test. As a matter of fact, there was more than one area in which the numbers of relief work appeared to indicate severe distress, but where subsequent investigation proved the distress to be of a very mild character.

Section 43 A.—Money doles were absolutely prohibited.

Section 43 B.—The bulk of the gratuitous relief was given at centres to which the selected residents of neighbouring villages resorted once, weekly.

Section 44.—The distribution of grain doles was directed, but tickets were also used for purposes of identification. The cheapest grain procurable was distributed throughout.

Section 45.—The exaction of tasks from recipients was abandoned in May after the system had been given a fair trial in the Sadar sub-division.

Section 46.—No payment for work done was made.

CHAPTER VI.

Section 54.—The Public Works Department were employed on several small works, such as tanks and village roads.

Section 59.—The officers in charge on relief works under the Public Works Department did not in practice receive orders from the Civil authorities except through the Executive Engineer. No officers in charge were responsible for deciding the rates of wage. These were fixed separately for each sub-division by the Collector.

Section 61.—No persons were allowed the minimum wage on admission until they had actually done some work. Persons were not admitted after midday.

Section 62.—The only classification adopted was able-bodied workers, D, weak workers. The small children were relieved as dependants.

Section 64.—Payments were throughout made to individuals and not to gangs.

Section 66.—Final dressing and making up was done in some cases by relief labour.

Section 67.—The penal rate was treated as the minimum rate. Workers were fined for short work on the principle that none should receive less than the penal wage. When the task was not performed in full every individual was fined.

Section 69.—Minimum wages were not always paid on days on which no work was done.

Sections 72 to 75.—It soon became obvious that applicants for admission should not be received. The officer in charge was allowed discretion in cases of applicants coming for work from villages within two miles of the relief work. No attempt was made to draft workers from civil works to works under the Public Works Department.

Section 78.—Residence in camp was not made compulsory.

Section 82.—Hospitals were not supplied at every relief work. In the Gopalganj Sub-Division there were two hospitals situated at convenient centres.

CHAPTER VII.

Rates of wage were calculated, not on the price of flour or cleaned rice, but on the price of unground grains, such as makai and bailey.

CHAPTER VIII.

I annex copies of the forms of registers which I prescribed for the poor-houses of the Saran District.

The ration prescribed for poor-house inmates does not include any anti-scorbutic vegetables. A certain allowance of such vegetables being necessary for health, I directed that a chatack of anti-scorbutic vegetables should be supplied with the daily rations.

(b) SUCCESS OF THE MEASURES ADOPTED.

1.—With regard to the relief of distress.

The main object aimed at in the Saran District was by systematic search in the villages themselves, to find out

those persons who being in the most abject and helpless destitution had been the first to feel the effects of the scarcity.

Success was, in my opinion, achieved by the method adopted of making the heads of the villages report these cases themselves, and have these reports checked and the lists supplemented by well-paid officers placed in charge of small areas.

The unemployed and impoverished field labourers found relief on the works that were provided in every area where distress showed signs of becoming acute.

The poorer cultivators were relieved by very liberal advances.

The broken-down of the respectable classes were relieved by the Charitable Relief Committees, and here the local indigo planters were of the greatest assistance.

In administering each of these methods, the District Officer did his utmost to see that no actual case of severe distress escaped relief. Circle officers had to send in diaries showing that they visited periodically every village of their charge, and advances were selected as a rule by gazetted officers of standing who made enquiries in the villages themselves.

2.—With regard to the saving of human life.

Not a single case of death from starvation was authenticated. The death-rate never exceeded 40 per mille per annum till August, when it reached about 73 in Chapra and Revilganj, and 50 in the Basantpore thana. The Civil Surgeon reported that the cause was malaria acting upon people reduced by insufficient food. No doubt the lowness of the death-rate is partially due to the healthiness of a dry year and the absence of cholera owing to the constant disinfection of wells.

3.—With regard to economy.

- (a) The utmost efforts were made to exclude persons not in actual need from relief.

Distributions of grain and relief works were both constantly inspected. The percentage of persons gratuitously relieved to the population only reached 5.5 in the worst areas at the worst period, and the total for the district was then only a percentage of 2.64 on the total population.

- (b) The self-acting labour test was only applied on a small scale, because—

Firstly, able-bodied males had emigrated, leaving their homes in charge of a single male; the families sitting idle at home and being used to field labour, had no scruple against turning out on to a work close to their homes where they were sure at any rate of getting the minimum wage.

Secondly, they could not for the same reason be compelled to come from a distance and settle on a work.

- (c) The expenditure on establishment amounted to Rs. 1,14,823, or 12.3 per cent. of the total expenditure incurred. For distress so widespread and for operations over so large an area it was imperative to employ an establishment which was numerous and highly paid as compared with the actual number of persons likely to require relief. A circle officer receiving Rs. 75 a month had to look after on the average 500 persons, and was responsible, therefore, for an expenditure of about Rs. 600 a month on actual relief. The staff of an ordinary relief work

Officer in charge	Rs. 75	cost about Rs. 180 a
Cashier	25	month as detailed
Sub-Overseer	35	in the margin, and
Gung Mohurrir	23	had to relieve on
Peon	6	the average 500
Constable	13	persons and spend
Mate	6	rather over Rs. 1,000
	181	on actual relief.

The ascertainable expenditure on establishment amounted to 12.3 per cent. of the total expenditure incurred. But this does not include expenditure on petty establishments. I estimate the actual percentage at 15 per cent. I do not consider that the establishment could have been curtailed, but perhaps the number of works was excessive.

- (d) The introduction of the Public Works Department was a costly measure and proved ultimately to be almost entirely a waste of money, but this could hardly have been foreseen. I append a copy of paragraphs 65 to 68 on this subject, from my district famine report.

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4.—Advice as to the measures and methods of working for future famines.

(1) A carefully prepared scheme of relief works should be prepared for the district, and more especially for the Gopalganj Sub-Division, the Basantpore thana and the Chapra thana, including the Gourkha and Banisapore outposts. The scheme could usefully include the making of channels and embankments.

(2) A map of the district should be prepared, showing in different colours the villages dependent, in different degrees, on the rice crop. This could be done with the aid of the Settlement Department.

(3) When famine is threatened, responsible officers should be appointed to areas conterminous with thana jurisdictions. They should be supplied with lists of villages largely dependent on the rice crop. Their duties should be not at once to prepare lists of the halt, maimed, blind, etc., but to visit these villages and discover whether private charity is beginning to fail, and if possible to direct private charity so as to prevent its waste, in order that its effects may last the longer.

Gratuitous relief should be started on the report of such officers, confirmed by the personal inspection of the District or Sub-divisional officers, who should use every available agency for the purpose of test.

(4) When it has been decided that gratuitous relief should be started in any area, the organisation that prevailed in the recent famine should be started. I append a copy of paragraph 74 of my district report in which the organisation is described.

(5) In the administration of gratuitous relief, attention should be paid to the following points:—

- The efficiency of the circle officers selected.
- The responsibility of the circle officers for the selection of recipients. Except in the most urgent cases, they should never be allowed to admit any case on the recommendation of the panchayat without enquiry in the village itself. It must be insisted on that responsibility lies with them and not with the panchayats.
- The necessity of appointing local committees at the centres of distribution, the members of which should attend the distributions and certify on the circle officers' abstract bill, that good clean grain was distributed and that the recipients were deserving.
- The paramount necessity of testing, not only the distributions by constant inspection, but the selection of the recipients by organised village enquiries. For this purpose every agency not immediately connected with the relief organisation should be employed. Planters would be most useful, so would the subordinates of the Educational Department.
- The importance of watching the in-coming of the various harvests and insisting on the reduction of numbers in the villages most relieved thereby.
- The reduction of numbers at the end of June.

Firstly, on account of the return of the emigrant males from Bengal.

Secondly, on account of the supply of light labour in the fields.

(6) Relief works should not be started until it has been ascertained through the local agency above described, that the distress consists of something more than the curtailment of village charity.

(7) In the administration of relief works, I would draw attention to the importance of the following points:—

- The importance of having a thoroughly efficient officer in charge and a complete organisation for the execution of tasks before large numbers are admitted. Urgent cases should in the meantime be relieved gratuitously.
- Principles of construction should be carefully explained before starting.

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- (c) A staff should be employed to see that earth carriers throw the earth in proper places, otherwise it becomes necessary to employ large numbers on untasked labour as dressers.
- (d) Every pit should be marked with a number to correspond with the number recorded in the measurement books. Failure to number pits should be treated as a serious offence.
- (e) The names of workers should be entered in the muster roll in the order in which an inspecting officer would naturally find the people at work, that is, in gang order, otherwise the check of the muster is impossible.
- (f) If the numbers on any work continues for seven days at less than three hundred, the work should be closed.
- (g) All work should be closed, if possible, in March and July.
- (h) With distress at the stage it reached this year, workers should only be admitted from villages within two miles of the relief work on a certificate signed by the circle officers stating that the applicants are actually in distress.
- (8) As regards poor-houses, I would have every case after admission referred to the circle officer for report as to whether the inmate had a settled home. If found to have a settled home, the inmate should be given a small sum sufficient to take him to his home, and a certificate entitling him to gratuitous relief, provided the circle officer was satisfied that there was no person responsible and able for his support. At the end of every month there should be a regular clearance of the inmates on the principles set forth in the Famine Code.
- (9) In my opinion the Public Works Department should not be introduced until actual scarcity has lasted over a second year. In the meantime the District Officer's hands should be strengthened as much as possible with professional engineering assistance.
- (10) When the Public Works Department are introduced, their operations should be confined to really important undertakings, and they should not be employed on tanks and petty road repairs.

5.—General recommendations.

The rice tracts in the Saran District are peculiarly dependent on well-distributed rainfall, because when rainfall is deficient there are, as a rule, no embankments to prevent the outflow of water and no channels for bringing water from the rivers. When rainfall is excessive there are not drains for leading off the excess water. There are relics of embankments and channels, but with the present subdivision of landed interests in the district, it is not to be expected that the people themselves will undertake their repair. There are several tracts in the district, notably the Hardia chavur, the Garkhar tract, the Kochai Kot chavur, which with an intelligent system of embankment and channels could be made to produce a crop with regularity even when rainfall was deficient. At present these areas practically only produce a crop when the rain falls at particular periods. The crop is either ruined by flood, for which there are no drainage channels provided, or by drought. These large areas are only examples of what happens in almost every rice area of any size in the district. If the matter could be taken up and the necessary works carried out by a department, I believe the cost could be readily recovered from the people, and the resources of the district would be so far increased as to render it practically immune against famine.

Appendix A.

65. At the Mozufferpore Conference held on the 4th and 5th December 1890, a resolution was passed that for the purposes of relief works, the Saran District should be formed into a Public Works Division. Mr. Maconchy was appointed to have charge of the Division and arrived in Chapra on the 25th February 1897. For want of the elaborate staff which is required by the Public Works rules, and on account of other difficulties connected chiefly with the collection of materials, work could not be started till the 20th March, just as the *rabi* harvest had brought alleviation.

The works under the Public Works Department were at first confined to the Gopalganj Sub-Division and suc-

ceeded in attracting labour only in East Gopalganj; the failure of the works in the Mirganj Thana, I ascribe to the fact that the *rabi* harvest and the advances given by the Raj had by that time practically put an end to distress.

66. During April Mr. Earle was pressing for the starting of works by the Public Works Department in the Sadar Sub-Division. I was at the time Charge Superintendent of this large area in addition to my duties as Joint-Magistrate, duties which were very onerous in themselves owing to the fact that the District Magistrate was entirely occupied with famine and Hatwa work. I was therefore in urgent need of help. For want of staff, Mr. Maconchy was not able to come to my assistance till the 27th May. Before that time Mr. Twidell and Lieutenant Grimley had arrived, and the relief works in the most distressed areas had become thoroughly well organized. Mr. Maconchy was therefore asked to take over the organisation of new works in the less distressed areas. The people were just beginning to start field-work, the rains began soon afterwards, with the result that the works were scarcely attended at all. It soon became obvious that it was waste of money to keep up a Public Works Department merely for a few works in East Gopalganj, and in consequence the Department made over all their works to the Civil Agency during the Jubilee holidays, June 21st and 22nd, and closed their offices as soon afterwards as possible.

67. Mr. Maconchy says that the reason why his work did not attract labour was that he exacted the proper task. No doubt the task demanded by him was in most cases severer than that previously demanded by the Civil Agency. But I attribute the failure rather to the fact that he took over each set of works just at a time when alleviation had set in, and in an area where the alleviation was permanent. If the aid of the Public Works Department had been available at an earlier stage, and if the district officials had been saved the labour of organizing works all over the district without any professional assistance, for there was no District Engineer, it would have been a great boon. The delay, however, though unfortunate was unavoidable.

68. My opinion regarding the advantages and disadvantages of works under the Public Works Department, so far as this district is concerned, is that the Public Works Department should not intervene, unless there is a distinct prospect of the people attending individual works in large numbers so as to make big undertakings possible. This will never be the case unless the distress is very much more severe than it was this year, and to produce such a state of things not merely is a range of high prices necessary, for these scarcely affect the cultivators, but a succession of crop failures must have occurred considerably worse than that which preceded the present famine. To combat the general distress which prevailed this year only among the most helpless part of the population, by the elaborate organization which the introduction of the Public Works Department involves, is, I think, waste of money. In such a condition of things, relief, if given at all, can only be given in a number of petty works scattered, it may be, over widely distant areas. The District Officer is in the best position to feel the pulse of the district, and if he is aided by an able District Engineer, he can deal with distress of this sort far better, and with far less expenditure. If distress of this nature occurs again, I would counsel the immediate provision of professional assistance to the District Officer and his District Engineer, rather than the importation of an elaborately organised department over which the District Officer has, as a fact, little control. If severe famine supervened and large works of importance became necessary, the department should of course be introduced, but the responsibility put on the District Officer should be curtailed. He should have nothing to do but to decide that the starting of a certain work in a certain area is necessary, and should have nothing more than the right of inspection and report afterwards; much inconvenience was caused from the existence of a dual authority. I would also suggest that the system of forms and accounts in the two agencies where they exist together should, as far as possible, be the same.

Appendix B.

Gratuitous relief.

74. Arrangements for giving it.—The census circle was taken as the limit of administration; where distress was most severe, there was one circle officer in charge of

each census circle; elsewhere circle officers had charge of two or more. The panchayats of the villages were ordered to prepare lists of persons residing in their villages who were deserving of gratuitous relief, the principles of section 42 of the Famine Code being strictly followed. These lists were handed on to the officers in charge of police-stations and outposts, who copied them into registers and passed them on to the circle officers concerned, who copied and returned them to the panchayats. When the panchayats wished to add new names they entered them in the lists thus returned to them and reported the new entries to the thanadars, who in their turn sent them on to the circle officers. The circle officers went with the lists so prepared to the villages, mustered the persons named in the lists, equated into their circumstances, and removed the names of those they considered undeserving, adding the names of those that had become eligible. The alterations made in the lists by the circle officers were also made in the lists kept by the panchayats, and at the thanas. The persons thus selected by the circle officer received tickets entitling them to gratuitous relief. For each census circle a centre was selected for distribution, and a day fixed on which grain would be distributed at the centre weekly. An arrangement was made with a *bania* to be present with a stock of grain for distribution at the fixed centre on the days arranged. The chowkidar and panchayat of each village brought up the ticket holders, of their village, and village by village they were admitted to the enclosure where the distribution was to take place. The circle officers called out the names of the ticket holders, who were identified by the chowkidar and panchayats, and they then had their weekly dole weighed out to them by the *bania*. For those who were unable to attend for any reason, the chowkidars took the doles, and the circle officer was responsible for visiting them afterwards to see whether the doles had actually been delivered. Circle officers were paid Rs50 with Rs25 as travelling allowance, and were each given a clerk on Rs10 to Rs15.

(*Mr. Holderness.*)—Will you tell us what your connection with the famine was?—I was Charge Superintendent, Sadar Sub-Division, Saran, from December 1893, and became Collector of the District in May 1897. I remained as Collector till the conclusion of operations.

(*Dr. Richardson.*)—With reference to the last paragraph of the first section of your note, was there any difficulty in obtaining the anti-scorbutic allowance?—No.

(*Mr. Holderness.*)—How many Superintendents had you?—Seven.

How many circle officers?—Sixty-three.

Were the seven Charge Superintendents, Europeans?—Yes.

And the circle officers?—All natives.

How much of the district was distressed?—We gave gratuitous relief in the whole district except in one small thana, that of Sousepur; but of course relief was not given in every village.

You had distressed areas and non-distressed areas?—Yes.

How were these villages picked out. I mean those in which gratuitous relief was given?—We followed the same system everywhere; panchayats were asked to send in the names of distressed villages and these lists were tested by circle officers.

Distress was caused mainly by the failure of the winter rice?—Yes.

The extent of the area under rice cultivation determined whether relief should be given?—We had lists prepared of villages which were entirely dependent on the *radi* and of those dependent on rice, and issued orders that recipients from villages entirely dependent on the *radi* should be removed. We coloured on the map the extent to which each village depends on the various crops. That was not altogether done, but rather what we aimed at.

The reports of circle officers were then tested?—Yes.

And relief was curtailed where necessary?—Yes, after the check.

May I take it that gratuitous relief was the main form of relief given in the district?—Yes, when distress was at the highest the numbers on gratuitous relief were about 56,000 and the numbers on works 23,000. There were in addition some 4,000 persons on works carried on at the expense of the Hatwa Raj under the supervision of the Collector.

What was the percentage on gratuitous relief to the total population?—2.05 of the population of the affected area in the worst month. The rice crop of 1896 was almost a complete failure in the district; while the aggregate outturn of the crops of 1896-97 is represented by 58 per cent. of an average aggregate year's outturn.

How was it there were comparatively so few people on works?—I think we had as many on works as we should have had. When we opened works we found that they were crowded by people from the neighbouring villages. It seemed to be an unsatisfactory test, so we organized a different system of relief. Relief works were not organized for the whole district, but only for a small area; gratuitous relief was given for nearly the whole district.

Distress was sporadic?—Yes, one village showed great distress and another close by was well-off.

Relief works might in that way relieve distress?—Yes, but they were mostly full of women and children; the males had gone to Bengal in larger numbers than usual.

(*Dr. Richardson.*)—Who made an inquiry into the case of people who died from want of nourishment?—One was inquired into by the Deputy Superintendent of Police; that was before I took charge; the others by the Sub-Divisional Officer. None were proved.

(*Mr. Holderness.*)—May it be presumed that gratuitous relief at home is very popular with the people, and that it is sought for by many who are not absolutely destitute or who are capable of labour on the relief works?—I should say not very popular; of course people actually hard up preferred receiving gratuitous relief to going on relief works, but we did not find a great rush of people asking for it.

It was not sought for by many?—No.

Was the circle and inspection organization at your disposal sufficiently strong, vigilant, and well-informed to restrict gratuitous relief to those who were incapable of work and would otherwise have starved?—Certainly to those incapable of work, but the difficulty of administering it was to find out whether we were restricting it to persons who would otherwise have starved; that is, to find out whether they had friends able to support them.

Do you think that the successful administration of this form of relief requires a larger staff of supervising officers in the superior grades than any other kinds of relief?—It depends upon the stage of distress. If the staff on relief works can relieve 1,500 persons at a time, probably relief works staff would be less expensive. In the circumstances of Saran the staff was not more expensive than a relief work staff would have been.

Does the acceptance of such relief place any social or caste stigma upon the recipient?—It does cast a social stigma, of course, on people of the respectable class, not on those of the lowest class, who were a large proportion. There was a superstition about taking gratuitous relief; the rumour spread that no children would be born to those accepting relief, and that if they were, they would die.

Did that continue or die out?—It died out afterwards.

People on gratuitous relief were mostly low class people?—Yes.

Does the knowledge that gratuitous relief is given by the State lead to the drying up of private and village charity quicker than would otherwise be the case, and tend to make the people cast their customary obligations for the support of the poor of the locality upon the State?—The tendency must be that way; in my experience it was so. At the same time there were many villages where the villagers took no advantage of the gratuitous relief.

Could some of the persons to whom gratuitous relief was given have been employed on light manual labour on relief works in or near the village?—As a matter of fact we did not admit to gratuitous relief people capable of doing any work.

Central kitchens, where cooked food is provided for all comers without any condition as to residence, have by some officers been preferred to gratuitous relief in the homes of the people, at least in the early stages of distress or when the distress is on the wane. What is your opinion on this point?—I am not in favour of kitchens, because we should have had such a large number and over a very wide area. The second objection is that I find kitchens do

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not really supply a test for low class people. I started kitchens and after a very short time I had to select the people who came, as on gratuitous relief. The cooked food is not a test for the low class, and certainly not for the high class; it is too severe.

What are the social and caste feelings of the people as to receiving cooked food in State kitchens? Would the substitution of kitchens for gratuitous relief in the form of grain or money doles practically exclude, on account of these sentiments, certain classes from relief who really need it?—It would exclude some.

Apart from the sentimental difficulty, would it be practicable to maintain a sufficient number of kitchens so as to be within the reach of all persons requiring gratuitous relief?—It would be too expensive. It would not be practicable.

Was gratuitous relief given in the form of grain or money? Which form do you prefer?—It was given in the form of grain. Gratuitous relief in the form of money would have been more popular. I prefer grain because it is less popular. It supplies an additional test.

Was it given in the actual homes of the people, or were they required to repair periodically to a central place to receive it?—They had to come to a central place.

(Mr. Bourdillon.)—What about the *parda nashins*?—Chowkidars always came with the recipients. In the case of *parda nashins* the chowkidars were responsible for delivering the relief to them. As a matter of fact there were very few *parda nashins* relieved by Government.

(Mr. Holderness.)—Within your observation was there much malversation or extortion on the part of patwaris or other subordinates employed in the distribution of gratuitous relief?—There were a good many complaints, but very few cases were proved. I do not think it went on to a very great extent. The recipients who came to the centres, when they took away grain, said they had to deliver

a certain portion to the chowkidars. It was not actually proved in any case, though there were some prosecutions.

To what extent was the existing revenue or police organization by villages or large groups utilised in ascertaining the persons requiring home relief and afterwards in distributing such relief, and how far had it to be superseded or supplemented?—The punchayats were chiefly utilized.

To what extent was gratuitous relief administered through voluntary unofficial agency?—To a small extent. A few planters were responsible for watching the distribution of grain. We started a few honorary circle officers, but did not employ them very long.

If you had to work this famine over again, would you, with your present experience, have as many people on gratuitous relief?—I think we might safely not have given gratuitous relief in certain circles where it was given, but the numbers of recipients in these areas were throughout very small, in some places it was a little over 1 per cent.

Outside these areas was the number in excess or not?—I do not think so.

If you had cut down the number, would the result have been to affect the death-rate?—Yes, I think so. If at first we had not taken up these areas the numbers on gratuitous relief would not have reached the high limit they did, but if, after having once started, we had cut the number down afterwards it would have been very dangerous. A very determined attempt was made by me, when I became Collector, to reduce the numbers on gratuitous relief; at the end of six weeks it was reduced by 11,000, but returned soon after to its original figure.

(Dr. Richardson.)—You were too stringent?—There were no actual deaths, but I think in some areas numbers were cut down too freely.

(Mr. Holderness.)—Had you many poor-houses?—We had five poor-houses.

The population was not very large in the poor-houses?—No.

At the Additional Commissioner's Office, Bankipur.

FIFTH DAY.

Friday, 28th January 1897.

PRESENT:

SIR J. B. LYALL, G.C.I.E., K.C.S.I. (PRESIDENT).

SURGEON-COLONEL J. RICHARDSON.

MR. T. W. HOLDERNESSE, C.S.I.

„ T. HIGHAM, C.I.E.

RAI BAHADUR B. K. BOSE, C.I.E.

MR. J. A. BOURDILLON, C.S.I. (Temporary Member for Bengal).

MR. H. J. MCINTOSH, Secretary.

MR. H. L. STEPHENSON, Officiating Joint Magistrate of Patna, called in and examined.

Mr. H. L.
Stephenson.
28th Jan.
1898.

I put in a written statement of evidence.

The measures of relief in the Bhabhua Sub-Division of the Shahabad District were as follows:—

Relief Works.
Gratuitous Relief.
Poor-Houses.
Kitchens.
Rest-Houses.

Relief Works.—These were all Civil agency, mostly roads; there was no special officer in charge. One sub-overseer was in charge of each work and was allowed a permanent advance; the Sub-Divisional Officer was in charge of all the works; the circle officers had nothing to do with the works and the Charge Superintendents only inspected. The labourers were classified B and D; the standard gang was three,—digger, adult carrier and child carrier; the task was fixed at 130 with variations for hard or soft soils; for any task below 100 the digger got penal wage; the carrier's wage was fixed, but for continued bad work the carriers were put on the penal wage.—For the roads the pits were marked out in advance with the road; the work done was measured and paid for on the next day; the digger was paid in the presence of the carriers. No adult dependants were allowed on the works; only children too small to work, for whom the mother was paid an allowance if the child had to be brought with her to the

work. Huts were provided, but only a small proportion of the workers used them at night; they were greatly appreciated for the midday halt; when possible the huts were made by D class labour. There were no hospitals on the works; the usual sanitary and water arrangements were made.

Gratuitous Relief.—Grain doles were invariably given; the cheapest grain procurable to the requisite amount. Private agency and punchayats were used to compile the original lists; the census circle was as far as possible used as the unit. The relief was distributed by circle officers at centres, 5 or 6 centres to a circle; every person on the list had a tin ticket with his circle and register number on it; this had to be produced at every distribution and at every village inspection, and was taken away when the name was struck off; *parda nashins* and cripples were allowed to send their tickets through the punchayats or chowkidar; there was a contractor for each charge; he sent a man to each distribution who weighed out the doles, and the actual amount used was paid for once a week. The circle officer checked and revised the lists and the charge superintendents also. The Charge Superintendents had nothing to do with the accounts; for account purposes the Sub-Divisional Officer was Charge Superintendent of the whole Sub-Division; this economised the work of the accountants. The women on gratuitous relief were required to spin cotton; and the men to make string which was supplied to the relief works.

For the Plateau a special cartage allowance of 8 annas a manud was sanctioned by Government for the grain for gratuitous relief.

After the *bhadol* crop had been cut, kitchens were opened as the most convenient method of doing away with gratuitous relief.

The persons relieved were mostly of the low castes; they were eager for the relief; the district is absolutely poverty-stricken, and the failure of the usual wage of one bundle in 16 at the paddy harvest, left the labourer without his usual resource; many emigrated and left their dependants behind; there are always a large number of the beggar class there, and paralysis among the men is especially common.

Poor-houses.—There was one poor-house only; the numbers in it gradually rose; they were chiefly the beggar class, who showed no reluctance to enter the poor-house; no one was allowed in unless he was unfit for work; most of them had no homes. The staff were chiefly paid by rations; the inmates were to a certain extent employed on making string and doing any light work necessary in the poor-house. The mortality was high at first, chiefly through diarrhoea and dysentery consequent on privations before they came in. A hospital was attached to the poor-house.

Interference with the supply of labour of private employers.

The new Mogul Sarai-Gaya Railway runs through the northern part of the Sub-Division and the railway authorities complained that, owing to the famine works, they were unable to get labour. They started their work at the rate of Rs 1-8 per 1,000, of which the contractor took 4 annas; the ordinary District Board rate is Rs 1-12; as prices were doubled it was impossible for labourers to earn a subsistence allowance at their rates. The work was done by petty contractors; anyone who liked to apply could take a contract for a few thousand feet. The railway then raised their rates by successive steps to Rs 2-8, which was more than our relief works were costing; but the bulk of this rise was intercepted by these petty contractors, who took the extra rate as extra profit and combined as far as they could to prevent others from taking contracts. There were no relief works in the northern half of the Sub-Division, and as soon as the railway raised their rates, we closed the works in the southern half that was nearest the railway. We made every endeavour to induce labourers to go on the railway; I have turned villages of professional earth-workers off the works, but only a few of them went to the railway; the rest filtered round to other works. I went round the villages to try and induce the labourers to combine and take a contract for themselves, thus saving the contractor's profit; but they are unenterprising people; the earth-work was only paid for once a week, and labourers really in need could not afford to wait. One of the engineers, Mr. Phillimore, started daily payment for piece-work, which was, I think, successful, but it could only be done on a small scale owing to the lack of staff necessary. The relief works had the advantages of daily payment, hutting and water arrangements, and the workers appreciated these. I enquired personally very closely from the villagers and workers into the reason why the railway could not get labour, and the reasons I believe were—

1st, the low wage that the work started at;

2nd, the want of daily payment which left the labourer absolutely at the mercy of the petty contractor, a man who had no standing and whose only aim was to make as much as possible. He was too small a man to take a big contract, and make his profit that way; he took a small contract, supervised it himself and made every pice he could.

The numbers on relief works in the Sub-Division were not large, and I believe that, had all our works been closed, it would not have appreciably altered the numbers on the railway; the chief result would have been an enormously increased number on gratuitous relief. There is no doubt there was a great scarcity of labour on the railway, but I do not think that the Government relief works or the way they were conducted had anything to do with this.

(*President.*)—You are a member of the Indian Civil Service?—Yes.

You had charge of the Bhabua Sub-Division?—Yes.

For how long?—From the middle of February to the middle of October 1897.

What part of the Sub-Division was most affected?—The lower half.

What was the reason that caused the distress to be severe in your Sub-Division as compared with the rest of the district?—There were no canals except in the northern part; besides, the Sub-Division is a very poor one. The cultivators are on *bhanli* tenure, and they have frequently no right to their land; are liable to be turned out.

Were prices higher in your Sub-Division than in the rest of the district?—I think they were about the same. It is very hard to tell because I had to get the grain from contractors.

Relief works and poor-house needs were supplied by contractors?—The relief works were not, but gratuitous relief was.

The gratuitous relief was village by village?—It was distributed from centres. There were four or five centres in each circle.

Was the distribution made in grain?—Yes.

What grain?—Partly rice and partly pea and barley.

For every man so much?—Yes, we could not always get barley and peas to go round.

Was the system of paying doles in grain adopted because it was thought it would be a test?—I do not know. It was adopted from the very beginning. We tried to keep money out of the hands of circle officers as much as possible.

Who were the circle officers?—They were natives, men from Government offices, clerks, and some *amedwars*.

What was the rate of pay?—Rs 50 a month, Rs 25 travelling allowance.

Did you have any volunteers from the zamindars?—At the beginning certain zamindars were given Rs 50 to relieve urgent cases.

What were the relief works?—Chiefly roads; one tank on the plateau and one tank which is being dug by the Court of Wards.

(*Mr. Holderness.*)—You never had many relief workers?—No, not more than about 12,000.

What was the maximum number on gratuitous relief?—Including dependants (children) it was about 30,000, I think. I have not been able to refer to figures.

What was the approximate area affected?—About 1,300 square miles, of which 600 square miles were plateau area.

How many charge officers were there?—Three.

All Europeans?—Two Europeans and one Inspector of Police who was a native.

How many circles were there?—I think eighteen.

How were the recipients of gratuitous relief selected?—In the first instance the *punchayats'* return was sent in, then, as circle officers were appointed, they went round, checked and compiled their own lists.

(*President.*)—In the Collector's report it is said that 46 per cent. of women to 19 per cent. of men and 34 per cent. of children were on gratuitous relief. I suppose most of the women were the wives of men on relief works?—No, the wives of men on relief works would be mostly on the works.

Who were these women?—They were women who were too old to do any work; they may have been dependants of people on relief works.

Was it ordered that women should go with their husbands to relief works?—No.

They were not able-bodied women?—No; it would apply to women with children as well as to old women; the children were taken on to relief works, and if not able to work, were given an allowance.

(*Mr. Holderness.*)—An able-bodied woman without a male relative would not be given gratuitous relief?—She would be sent to the relief works.

(*President.*)—What was the proportion of women to men on relief works?—Twice as many women as men were on relief works.

What was the reason?—A large number of men went to the south (to Calcutta) in search of work before relief works were started.

Did they return when relief works were started?—They began to return towards the end.

Mr. H. L. Stephenson.
28th Jan.
1898.

Mr. H. L. Stephenson. (*Mr. Holderness*)—Had you many relief works open?—I think eight at one time.

28th Jan. 1898.
Was the principle observed that all who could do a reasonable amount of work were expected to work as a condition of relief?—Yes.

What was the reason that the number on works was comparatively small?—I think in ordinary times the district is poverty-stricken, and in time of famine the dependants are left to look after themselves entirely. There is also a peculiarity in the district of the disease of paralysis of the leg which attacks the men and accounts for the number on relief.

Do you think all the persons who received gratuitous relief were without resources?—Yes, as far as we could tell.

And that they were persons who had no one to support them?—Yes, as far as we could tell from inquiries from the people in the village. We satisfied ourselves.

These lists were constantly checked?—Yes.

(*President*).—Who did you treat as bound to support a paralysed person? Did you treat a son as bound to support his father, or a man his mother?—Yes.

If a man was working as an agricultural labourer, do you consider then that he was bound to necessarily support a poor relative?—It depends upon what work he was doing. There was very little field work going on.

(*Mr. Holderness*).—To what class did the persons chiefly belong?—To the low class, chamars, etc.

And as regards *parda nashins*?—There were not very many, from about June the *parda nashins* were taken off our list and relieved from the Charitable Relief Fund.

When did you stop gratuitous relief?—From the beginning of September, after the *bhadoi* crop came in.

What happened to the people whose doles were stopped?—They had gone back to charity.

Was the mortality high in the Sub-Division?—Yes, at one time it was higher than the average; that was in March and April, when there was small-pox.

But for that period was it fairly normal?—Yes.

(*Dr. Richardson*).—Was the high mortality the result of hard times?—No, it was the result of the small-pox.

(*Mr. Bourdillon*).—Was there not a good deal of fever during September and October?—Yes.

(*Mr. Holderness*).—Was there any reluctance to accept gratuitous relief?—None whatever.

Had you more applicants than you could consider?—Yes.

Was there any social or caste prejudice against it?—None.

Had you any poor-house?—Yes.

What was the number in it?—Generally from 150 to 200. In the rains nearly 300.

Were there any kitchens?—There were three rest-houses on the Grand Trunk Road; there were no kitchens until September.

Was food distributed to any new comer?—Only to the people on the list, in place of gratuitous relief.

Had you many of these kitchens?—One in every circle.

Do you think you could use kitchens instead of gratuitous relief throughout the province?—Yes. You would require a much greater staff. You would get the people assembled together, and they would live where the kitchens were.

Would kitchens exclude persons who ought to be relieved?—I think it would on account of caste prejudice.

(*President*).—Gratuitous relief was started in your district in February?—Yes, on the 6th of February.

That is later than in some other districts?—Yes.

Is there much of that paralysis of the leg that you spoke of in the rest of the district?—I cannot say.

Did people come to your kitchens or gratuitous relief centres from other parts of the district?—No, I don't think so. On the Grand Trunk Road rest-houses they came from the North-Western Provinces.

(*Mr. Holderness*)—Had you any emigrants from Native States?—No.

On the whole, if a famine occurred, would you manage it on exactly the same lines as the last?—I think so.

No change would be suggested by the experience you have had?—No.

(*President*).—The people who came to the relief centres took their grain and returned to their villages?—Yes.

How far had they to walk?—I suppose about 2½ or 3 miles. Distribution was made once a week. Some people had to send their tickets through (chowkidars or punchajats).

(*Mr. Holderness*).—How many centres were there?—Four or five in each circle.

Who was the distributing officer?—The circle officer.

(*President*).—How many days' provisions were given out?—Seven days.

(*Mr. Holderness*).—Did you get any work from the recipients?—Yes, the women spun cotton and the men made string.

Were they required to hand in their work at the end of each week?—I don't know if they were very strict about that.

You had to supply the material?—Yes.

(*President*).—What accounts did you keep with the contractor?—The circle officer arranged about the weighing out of grain and gave the contractor a voucher. He was paid at the end of the week.

Was there much competition for the appointment of contractor?—No, only a few men were big enough to take it.

Where did the grain come from?—They imported it. The rice was all Burmese.

Were the prices the contractor received the same as those of the nearest mart?—The price was settled beforehand. It was generally something over the market rate.

(*Mr. Holderness*).—Were food-stocks exhausted in the Sub-Division?—I could not get any large quantity. The *rabu* was exported when it came in.

(*President*).—What does the *rabu* consist of?—Peas and gram.

Is it a sugar-cane district?—Yes, there is a certain amount of sugar-cane where there are wells to work it.

Is there any poppy?—Yes.

Who do the zemindaries belong to?—Chiefly to small maliks.

(*Mr. Bourdillon*).—The rice crop was a total failure was it not?—Yes.

(*President*).—You think very little of the *rabu* produce remained with the tenant?—Not enough to affect the market at all.

The country round Sasaram was not affected?—Very little I believe.

You say a bonus was given to people who would carry grain to the plateau?—It was given to one contractor.

Did he take a large amount?—As much as was wanted for gratuitous relief. It was given for that purpose.

(*Mr. Holderness*).—Are the people aborigines?—Yes, I think so, Kardwas.

Is there much jungle produce for them?—Yes, they live on jungle fruits.

(*President*).—Was the gift of a bonus to one contractor likely to discourage other grain dealers from taking it up?—I don't think anybody would have taken any grain up.

You think he was the only man who did take grain up?—Yes.

(*Mr. Holderness*).—Was this bonus given during the rains?—A little before the rains.

(*President*).—What class of people take grain up to the plateau?—I don't think any grain is generally taken up there. The villages are self-supporting.

What relief was given there?—It was on a small scale, the numbers relieved came to about five or six hundred.

(*Mr. Holderness*).—The bulk of the gratuitous relief was in the low country?—Yes.

The distress was due to failure of the rice?—Yes.

(*President*).—How many relief circles did you have on the plateau?—Two.

(*Mr. Holderness*).—In the plateau have you the Panchayat system?—The villages are very closely connected there.

Was there any wandering from the plateau?—Not much, some of the men came to the relief works.

Was there any emigration to Assam?—No.

(*President*).—Practically for persons relieved you depended upon contractors, not the open market?—No, on contractors.

For all village relief?—Yes.

And for the works?—We left it to the bania.

(*Mr. Holderness*).—Was not the contractor merely a big bunniah?—Yes, a local man.

(*President*).—Did the men complain of difficulty in getting grain from the bania?—No.

The rates were, if anything, lower?—No, they had to pay more than I did for it.

Was kuma rice used on relief works?—I think it was.

I think you said that in dealing with your contractors you generally had to give some higher rates than prevailed?—No. We got more for our money than we would have got in the open market.

(*Mr. Holderness*).—Did your rates include carriage to the relief centres?—Yes.

(*President*).—Did you tell the contractor how much you wanted or did he calculate?—He knew how many people we had.

You saw no sign of anything like a ring among dealers to keep up prices?—No. They were much too small.

Did prices vary frequently?—No, I don't think very much. They varied to a certain extent in different places from 6 to 7.

Whatever rate they had lasted for a considerable time?—Yes, I think so.

Did you alter the cash rates which you paid labourers often?—Only once.

Did the local banias have the men working on relief works at their mercy. Supposing they raised the *mirak* on them, did the workers have any redress?—There was only one complaint.

I suppose the quality of the grain was periodically looked at?—Yes.

Were there any complaints of the quality of the grain?—No.

On a particular relief work did the men generally all buy from one bania?—There were generally two or three men.

Independent men?—I think so.

I suppose the chief mart was Bhabua?—Yes, there was very little grain dealing done except there.

The Collector says that relief was begun rather late. Was it at first expected relief would not be wanted?—I did not come to the Sub-Division till after relief was begun.

Are there any patwaris in your Sub-Division?—Yes, there are.

Who are they paid by?—By the maliks.

Do they make returns of the crop area and the condition of crops every season?—No, I don't think they do.

Have you any experience of crop returns? Are they reliable?—The only crop return for the sub-division, I was personally concerned with, was for the *bhadosi*; I think that was very unreliable.

That was sent through the police?—Yes.

How are the police supposed to ascertain the crop area?—Through the chowkidars.

Zemindars and patwaris are entirely out of it?—Yes.

(*Mr. Holderness*).—All your public works were conducted by Civil Agency?—Yes.

What was the reason that the Public Works did not take them over?—They were all small works.

And conducted under the ordinary task system of the Code?—Yes. I gave penal and minimum wages when necessary.

Was the work chiefly road-making?—Yes.

Were there any tanks?—Yes, one on the plateau, and there was one other.

Do you think you wanted larger works than these?—No, I think they were sufficient.

There was no great demand for employment?—No, there was no rush on the work.

Was it often that the penal wage had to be insisted on?—No, not very often.

(*Dr. Richardson*).—Did the people have any food to fall back upon?—I think the wage was quite sufficient.

You don't think they fell back upon private supplies?—No.

(*Mr. Bourdillon*).—The people you relieved gratuitously were not likely to have any stocks?—No.

(*President*).—The task was a very light one I suppose?—No, I think not—130 cubic feet for a gang of three. The soil is heavy.

Was the tank a success?—We could not get very far with the one on the plateau, because we came to the rock. It was very expensive on account of the rocky ground.

Will it be useful?—Yes, as a village work.

Is that for irrigation?—No, for cattle and the supply of water.

Are there many tanks in those hills?—No, we had to make several wells there.

Within your observations was there much malversation or extortion on the part of patwaris or other subordinates employed in the distribution of gratuitous relief? Were there any instances in which persons paid money, or surrendered part of the dole, in order to be placed on the gratuitous list?—There was only one instance brought to my notice where the person paid the chowkidar one anna to put his name on gratuitous relief.

Under the circle officers was there anybody but the chowkidars and village headman?—There was nobody under the circle officer. The chowkidar and headman had nothing to do with it.

The circle officers you think did their duty well?—I think so. They never had the handling of any money.

After the list for gratuitous relief was made out, did the circle officers have the necessary additions made to it?—The circle officers were supposed to go round every week and bring on new applicants.

Then the circle officer enquired again about each new applicant?—Yes, from the villages.

In a public sort of way?—Yes.

Was there any voluntary official agency for administering gratuitous relief?—Not for Government relief.

Was there any kind of private relief?—Yes, at the beginning, before Government relief was started, a private subscription was opened.

(*Mr. Bourdillon*).—Was that afterwards merged into the Charitable Relief Fund?—It was kept separate but was along the same lines.

(*President*).—Was that in Bhabua itself?—Yes.

You say in your written evidence that there was one poor-house, where was that?—At Bhabua.

What was the distinction between people in the poor-houses and those on gratuitous relief?—The people in poor-houses were of a lower set; they were generally people who had no homes practically.

Were they nearly all people of the Sub-Division?—Yes, mostly, a few came from Allahabad.

Were the people who came from Allahabad *fakirs* or wandering beggars?—Chiefly wandering beggars. There

Mr. H. J. Stephenson.

28th Jan 1898.

Mr. H. L. Stephenson. were three orphans who got left on the road from Allahabad.

Was the poor-house ration prescribed in the Famine Code adhered to?—Yes.

Do you think it sufficient?—Yes, I think so.

Was it varied in the case of sickly persons?—Only when ordered by the doctor.

Do you think the Famine Code directions for the management of poor-houses sufficient and suitable, or can you suggest any improvement?—No, I can suggest nothing.

Did all the people in the poor-houses come of their own accord or were they compelled to go there?—No, I think they were all willing to come; a few children were unwilling.

Were they deserted children?—Yes.

Was any endeavour made to get work out of them?—Yes, they made string.

(*Dr. Richardson.*)—Did any die in the poor-house?—Yes, at the beginning, but later on the mortality was nothing.

(*President.*)—Did they wish to leave?—No, they were inspected before they went in to see that people able to work did not get in.

There were no relief kitchens at the relief works?—No.

Were any doles given to children or people unable to work?—Only to children who had to be brought on to the works by their mothers, that came to one pice.

Did they keep their children well?—Yes.

(*Dr. Richardson.*)—Was there any expenditure on Mellin's Food for the children?—No.

(*President.*)—Do you know if the population of the Sub-Division has increased in the last two or three censuses?—No, I do not.

Is there any difference in the healthiness of this Sub-Division which is not irrigated and that of the neighbouring country under irrigation?—I think fever is always in the Bhabua Sub-Division.

You have not heard it spoken of by the natives?—No, it is considered a feverish place.

(*Dr. Richardson.*)—What is the nature of the soil?—In the north it is all black cotton soil.

Is it more feverish there?—No, it is more feverish in the south.

(*President.*)—Did the people in the poor-houses make any complaints to you?—There were always complaints.

What were they about?—One complaint was that they were not allowed to smoke.

What was the reason for stopping their smoking?—Well, they were not given tobacco.

If they had tobacco, would the smoking have been stopped?—Yes, the poor-houses being built of straw it could not be allowed.

Did they complain of the food they got?—Yes, there were general complaints.

Do you remember how many meals they got?—Two. At what times?—At 10 and 6.

(*Mr. Holderness.*)—I suppose the women complained more than the men?—Yes.

(*President.*)—Can you say how the diet in the poor-houses compares with that of prisons?—No.

Latterly the health in the poor-houses was good?—Yes. There were always a few cases of dysentery.

What was the proportion of cultivators, men with holdings of land, who came on to relief?—I should say there were very few. They were mostly yearly tenants.

(*Mr. Holderness.*)—Am I right in saying between 6 and 7 per cent. of the population was on gratuitous relief?—Yes.

(*President.*)—If very few of even the poorest cultivators came on to relief, how do you explain it? Do you suppose they had any stores of grain or resources?—Yes, I think they had sufficient for themselves.

Can you say what the ordinary wages of a coolie are in your Sub-Division?—No; for harvesting they get one bundle in sixteen; they are paid in grain.

You don't know whether the wages went up or down during the scarcity?—They got less grain. There are very few cash wages paid.

Do you know whether they sold much of their jewellery, brass pots, catils, etc.,?—I did not hear. I don't fancy very much.

MR. H. EDWARDS, District Engineer of Shahabad, called in and examined.

Mr. H. Edwards.

28th Jan. 1898.

I put in a written statement of evidence and written answers to the Commission's questions.

(a) Departures from the prescriptions of the Bengal Famine Code, which have occurred in this district during the recent famine, were very few. The classification of relief-works was revised. Classes A and C were abolished, B and D remaining. The large majority of A Class labourers left the affected area for more remunerative works which were being carried out in Lower Bengal and Orissa as soon as the pinch began to be felt. It is probable that this class of labourers would not have gone so far afield for work had the rates offered by the Mogul Sawai-Gya Railway authorities been more attractive. This railway runs through the affected area, and the embankment was in course of construction during the famine period, and I feel confident that had a fair rate been offered, a large number of these labourers would have been content to remain comparatively near their homes.

With regard to C Class labourers, i.e., able-bodied persons not accustomed to labour, none presented themselves on the work and so the class was abolished.

(b) It is my opinion that the measures adopted for the relief of distress and the saving of human life have been eminently successful. As the Engineer in charge of all the relief works in the affected area, I had peculiar facilities for ascertaining the condition of the people, and it is my firm conviction that not a single life was lost in the Bhabua Sub-Division from pure starvation.

It is possible that a small number of old and diseased persons died off, their end being hastened by the prevailing scarcity and by the absence from their homes, on relief-works during the day, of the members of their families who might have attended to them, but no single instance came under my notice of a person dying from actual want of food.

With regard to economy, I believe that every care was taken to husband the funds available compatible with efficient relief. The check exercised by the Sub-Divisional Officer and his Charge Superintendents over the Circle or disbursing officers was, in my opinion, as close as possible, and the physical effort exercised by the controlling officers in constantly inspecting the disbursing officers was carried to the limit of human endurance.

(c) With regard to the measures and methods of working likely to prove most effective in future, I would recommend that the simplified classification on relief-works, i.e., B and D Class only, be adopted, for I believe that the professional labourer will always be able to find remunerative work elsewhere, and as he is generally able to remit money to his home, in a measure he is able to keep the remaining members of his family from actual want, and as this has the double advantage of maintaining his family and saving Government money, I think he should be discouraged from appearing on relief works.

2. Under the terms of the existing Code, it is not within the power of any officer to refuse work to people who are not in need of work. It was frequently brought to my notice that as the work on a road embankment approached a village, a large number of well-to-do cultivators would apply for work and would remain on it so long as it was in close proximity to their homes, deserting it as soon as it necessitated a walk of a mile or two a day. I fully admit the difficulty of dealing with this question in a manner which would not bear hardly on deserving and really needy persons. If a distance limit were introduced it would probably be the means of checking the evil. The only other way of checking it would be to give the Officer in Charge discretionary powers to refuse work, and report the occurrence at once to the Charge Superintendent, who could investigate the case on his next inspection. For obvious reasons it would be undesirable to vest the Officer in Charge with complete powers.

3. Another matter to which my attention was drawn was the mode of relief to the dependants of workers. The present system of disbursing relief to these persons is objectionable. In the first instance it creates a lot of work for the moburrins and takes up a lot of valuable time of the officer in charge in checking. It also opens the door to dishonest practices, inasmuch as it is a comparatively easy matter for dependants to move from one gang to another while the tally is being taken and so be paid twice over.

There is very little chance of this occurring with young children, but in the case of old and weakly dependants the door is thrown wide open. This class of people should, I think, be provided for and paid separately from the rest of the gang. They should either be provided for in their homes or in a specially prepared enclosure at each work.

There is no reason that I can devise why an enclosure should not be made close to the works where all dependants could be collected and dealt with apart from the gang.

The difficulty of placing them on village gratuitous relief would be, in the case of weakly persons, that they would be unable to go to the relief centre to get their weekly ration, and as the rest of the family would be on works some distance from their homes they would probably die. All things considered, I think the formation of dependants' enclosures at the works the best, and I can conceive no difficulties in working such a scheme.

My remarks under this heading would not be complete if I omitted to state that it is my firm conviction that on road embankment works, controlled by professional Civil Agency, the task system worked by small gangs and up to a limit of 3,000 workers, is the best. The whole of the works in the Bhabhua Sub-Division were carried out on these lines. An efficient control of both the labour and establishment was maintained throughout. The check was easy and simple as each pit, which was numbered and dated to correspond with the measurement book and daily register, could be check-measured by the inspecting officer at any time. The system worked in an eminently satisfactory manner up to a limit of 3,000 people. Beyond that number it is probable that a system of piece-work would be preferable and, indeed, necessary.

(d) My only other recommendations relate to the maintenance of a complete record of the *modus operandi* pursued during the late famine.

When, in October 1896, it was seen that famine was inevitable in the Bhabhua Sub-Division of this district, I endeavoured to obtain some useful record of the previous famine which might be a guide to us in organising plans that might be of assistance to us in the coming struggle, but got nothing of any value.

For future guidance I recommend as follows :—

1. That a map of the affected area, one inch to the mile, be prepared and a copy be hung in a conspicuous place in each of the following offices :—

Collector's, District Engineer's, Sub-Divisional Officer's and Inspector of Works.

For the better preservation of the map it should be varnished.

2. The affected area on the map should have the charges and circles clearly marked.
3. Within each circle the following information should be printed :—

No. of gratuitous relief.	Circle No.		On relief works.
	Area. Population—	Square miles.	
December 1896
January 1897
February "
March "
April "
May "
June "
July "
August "
September "

All proposed future relief works should also be shown on the map, and opposite each work the following information should be given :—

1. If earth-work (quantity cubic feet.)
2. No. of persons that the project can provide work for daily for a period of three or four months.
3. Staff required for controlling the work (to be determined by the experience gained during the 1896-97 famine).
4. Estimated cost (rates to be fixed from actual figures of the past famine).

If all the above information is ready to hand in each district when the next famine occurs, the amount of labour which will be saved in organization and starting operations will be incalculable. Every responsible district officer will know exactly where the pinch will most probably be first felt and will be able to act accordingly, as it is more than likely that the manner of approach and development of famine in a district in any one year will bear great similarity to those that have preceded it.

2. As to the future of the affected area, a great deal depends upon the decision arrived at by Government on the question of irrigating a portion of the affected area from the river Karumnassa. A representation has already been made, and I think that the matter should be investigated, for if it is proved that the River Karumnassa can give a supply sufficient to irrigate that part of the country lying west of Bhabhua town at a reasonable cost, it is probable that merely nominal measures will be necessary to cope with distress in that part of the district in future.

Written answers to the Commission's questions.

*1. Plateau	780 sq. m. pop.	25,500
Grand Trunk Road to Plateau	536 "	250,000 acute.
Grand Trunk Road to north	316 "	106,000
	1,632 "	381,500

2. Failure of rains and harvests.
- 3 (a) Rains (normal) = 40.00, actual = 18.82 June to October 1896.
Rice crop, complete failure. Rains practically stopped end August; winter rice, 1895 only 10 annas; rabi 1895-96 = 11 annas; bhadoi 1896 = 7 annas.
(b) Yes. Higher at times, 1873-74, 10 to 13 seers per rupee; 1896-97 = 7 to 13 seers per rupee.
4. See 3 (a); unfavourable.
5. They are very poor.
(2) Yes. Population on Plateau. Rice principal crop, but also live on forest fruits, especially in bad years.
(3) No. Area = 780 square miles. Population = 25,000.
6. Yes; soil does not retain moisture well, and the zemindars and cultivators are too poor to incur cost of works for storing water or digging wells; very bad cultivation.
7. Zemindars have as a rule small reserves of money. The tenants (Assamis) as a rule have small reserves of grain. The people who have not such reserves are the daily labourers, professional earth-workers, weavers, mochia, village smiths, barbers, etc., and the beggar class; and their proportion to the total population is about 10 per cent., i.e., 6.4 gratuitous labour; 3.6 relief works.
8. It was more extensive and more acute I believe.
9. No.
10. Yes. May do in certain small areas.
11. I believe they compare favourably.
12. Generally speaking, no. A number of well-to-do cultivators would come on to relief works so long as the works were near their homes, and desert them as soon as the works were a short distance away.
(2) Not under gratuitous relief.
13. No.
14. Arrangements sufficient.
15. The mortality in the affected area is always higher than in other parts of the district. Excess mortality on

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* The numbers refer to the questions drawn up by the Commission.

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present occasion caused by outbreak of small-pox and not by want of proper relief measures.

16. No.
17. No.
18. Yes.
19. The test is not infallible as numbers of comparatively well-to-do people will work for a small wage so long as the work is near their homes.

(b) Yes.

20. Yes.

21. My experience has been about 2 to 1, i.e., 6·4 per cent on gratuitous not subjected to task test, and 3·6 on work subjected to the test.

22. The task was a full one, but the test is not infallible, *vide* (19).

(b) No.

23. The works have been more numerous. A considerable number lived on the works. Residence on a work is disliked by certain classes only (better class), and I consider it is a test in a way but not a fully reliable one. Making residence on the work obligatory would, I think, be a better test.

24. Maximum pressure was week ending 17th April when in the area in which famine was acute 10,000 people were on works; population of that area was 250,000 so that per cent. = 4.

25. Cannot say.

26. I think that a considerable number flock on to the works and were content with the minimum wage. Many of these were not really in need of relief at the beginning of the famine.

27. By means of doles of grain.

28. I do.

28(b). I do not think it was too lavish; 15,724 relieved at home = 4·11 per cent. of population affected area. Highest number reached on gratuiton was 24,355.

29. It has saved lives and kept households together, but I do not think it has further demoralized the people of Bhabua.

They are past such influences.

30. (1) Rupees 3,36,228.

(2) Rupees 48,82,762.

3. About 1 anna 4 pies.

4. I believe it has been.

31. Loans were given in small amounts under the Agricultural Loans Act and were granted as widely as possible.

(2) The collection of rent was practically suspended from December till close of famine.

(3) There has been no remission or suspension of revenue on account of famine.

32. I believe they have already recovered. Under normal conditions they are extremely poor.

The land-owning classes have merely lost their rents for the year.

34. Yes and no.

35. The Sub-Divisional Officer and his subordinates should know.

36. Fully so.

37. I think so.

38. I hardly think so, but cannot say.

39. *Relief Works—Gratuitous Relief.*

(1) Grain doles, (2) kitchens, (3) poor-houses and (4) relief of dependants of workers given in money.

Agricultural loans and advances.

Private Relief.—Three or four zemindars opened works on their own account from money available by Government.

Charitable fund.

40. I have experience only as far as works are concerned. I have had entire charge of all Public Works in the famine area during the whole period.

49. My note regarding clear record of *modus operandi* pursued during past famine. My note of evidence enters into this matter in detail.

50. Civil.

(a) 9.

(b) 3.

(i) 55½ miles.

52. (i) About 3,000 people.

(ii) About the same number I should think if the metal is broken at sites. Too congested to employ more.

53. Yes, if kept in repair, which is doubtful.

54. No.

55. Owing to distance of quarries from home and great cost of carting metal, I place no value on the scheme.

56. No.

57. Roads are preferable to tanks, but I think they are valuable as a means of giving relief.

(ii) Of little value.

58. Civil Agency = 3.

Day units, about 2,000 per diem for 3 months = 180,000.

59. About 1,000.

There is only one way that I can think of, and that is that a responsible overseer be placed in charge of a number of tanks, a road munshi and clerk and two mohurrirs to be the local establishment on each tank. No work to be started until whole population of village has been paraded and only field and daily labourers and poor artisans on wages be engaged. Ryots should be excluded as they nearly all have reserves.

60. Not exhausted. Room for any number more.

62. A great deal more might be done in this respect. Ahraha,* if maintained, are of great benefit, but would not prevent famines caused by short rainfall, would increase prosperity of people in good years and so enable them to better withstand scarcity.

63. No project at present except on certain private estates.

64. None.

67. Yes, I think a project for bringing water from river Karumnassa to those parts which were actually affected should be worked up. I believe it would be of immense value.

68. None.

69. I do. I am entirely in favour of large useful public works in preference to a number of small and useless ones.

(a) Canal, for instance, from river Karumnassa, to certain affected tracts.

(b) I do not think the loss in revenue would be out of proportion to the benefits expected. Indeed it is quite possible that revenue and working costs would balance.

(c) Cannot say. Project should be prepared.

70. Bengal Government Resolution, dated 9th January 1894, with appendices to Code Forms 1, 2, and 3. Forms are filled up and submitted to Commissioner 1st April each year; *vide* section 8 of the Resolution. The Code has been in practice observed. Plans and estimates were ready.

71. (a) Three miles.

(b) We had people coming from 18 to 20 miles who lived on works.

72. I do. When the pinch comes and if the people are given to understand that the nearest relief centre is at such and such a place and they will not get relief unless they work there, they will go.

73. I think it would be useful if in practice it was feasible. I doubt if many non-earth-work people would go. Professional earth-work people are Noniahs, Keota, Rajbura, Binda.

74. Residence on works has been the exception, not the rule.

75. It has not. (2) Yes.

76. I am in favour of inducing residence by concentrating works.

(2) I know for a fact that in the early part of our relief operations a large number of Assamis came on the works, did a little work, and were contented with the minimum wage. As a matter of fact a portion of the day was spent on the work in their fields.

(3) In a way it is a test but not a true one, especially at the beginning of a period of scarcity. Making residence obligatory would be a better test.

77. It is not distasteful among the classes most affected by famine.
78. It would not be large enough.
79. No reductions have been made for distance because they had the option of residing on the works.
80. About 6 annas per head.
81. We had no resident labourers in the cold weather.
82. No.
83. Our works were not very large, so I can make no comparison. Three thousand was the largest number employed on one work.
84. All task-work, which was controlled by professional Civil Agency.
85. For large works only.
86. In large works giving employment to over 3,000 for three months.
87. Overstated as far as remunerative public works are concerned.
88. I recommend they be placed in a dependants' enclosure on each work and treated gratuitously separately for working gangs.
89. I would not limit the amounts on remunerative public works such as a canal or railway embankment. On purely famine works, such as tanks, I would fix a maximum; I would limit it on test works.
90. About 50: 10 or 12 diggers and 35 to 40 carriers.
91. Yes, provided the head mate and gang come from one village and complaints against cheating are duly enquired into by the officer in charge, difficulty with contumacious labourers will continue.
92. I cannot say, but I think a small reduction might be made; could do with fewer clerks and mohurrirs.
93. The people would probably leave the work but would come back again. Strong and good workers would agree.
94. I would have two classes B and D.
95. At 9½ seers per rupee, i.e., at 16 chattaacks per seer. These diggers would get 1 anna 6 pies or 14½ chattaacks, adult carrier the same; child carrier 7½ chattaacks or 9 pies; and dependent adult 4½ chattaacks or 6 pies, and child 2½ or 3 pies.
96. The above is based on a mixed ration of pea flour and rice.
- 96A. Women diggers ought to have a smaller task, about 20 per cent. less.
97. (i) Classify as carriers, same task as a woman and remunerate them in the same way.
(ii) Dependent children below 8. From 8 to 12 would give them half task.
98. None below 8 years.
99. I would put them on penal wage at once and if they failed to improve, put them in dependants' enclosure or send them to the poor-house. It was found very difficult to work section 71 of the Code in looking up past record of the man.
100. Penal wage is necessary.
101. (i) Yes.
(ii) No.
102. Yes, on remunerative public works but not on useless famine works.
103. I am, provided they have attended regularly during full week.
105. Mr. Higham's report has not yet reached me.
107. Untrained establishment could not do it.
108. For road work in soft soil one digger and two carriers.
For tank work carriers would exceed.
109. No.
112. Thirty-seven per cent. males and 63 per cent. females.
(2) Not varied much in this district.
(3) No.
113. Men are frequently able to earn a bare subsistence from the Assami for himself, but not for the women. I have known cases of men being kept on village works by the Assamis but could not earn sufficient to keep the members of their families who came to the relief works. The Nokrani system frequently created this state of affairs. The labourer being the servant of the Assamis received payment in kind and a small plot of land for himself. In many cases the males went to works in Bengal and Orissa, and probably earned enough for all. This refers only to professional earth-workers.
114. Only minor works should be carried on through non-professional agency.
115. The Collector should fix the wage and the number of labourers to be employed. All details of work and management being left to the Engineers, who should supply any information required by the Collector.
116. Responsibility as above. The Collector that the work is provided, and the Engineer that it is done as economically as possible.
117. Inspection only; should have no power to give orders.
118. Selected non-commissioned officers (British Army) and Sub-Deputy Collectors.
119. Most certainly.
120. The senior officer should be in supreme command assisted by his subordinates.
121. Controlling and Inspecting Officers but not the officer in charge; third class powers, i.e., Rs50 fine or 1 month.
122. All works in Bhabua were done by professional civil agency.
123. Question did not arise in Bhabua.
(i) Daily.
(ii) Once a week.
125. Pice.
126. Mohurrirs in the presence of the officers in charge. A single cashier could not make 1,000 payments under 5 or 6 hours, so that a large proportion of the people would have to be kept waiting an unreasonably long time.
127. Certain people were admitted on the works by *chalan* from Charge Superintendent. They were not necessary, or required. The people who came with *chalan* were transferred from gratuitous relief.
128. (i) No. (ii) Yes.
129. 3,000 (maximum).
500 (minimum).
130. I am not. If the parents are working they should get the dependent children's wage. If children are without parents, they should be fed from kitchens and sent to certain centres such as poor-houses.
131. About 50 per cent.
132. Cash book and Imprest accounts for recoupment was found to work admirably.
133. From East Indian Railway. They complained that our works were too close to theirs and rates too attractive, so that they could not get labour for their embankments. Heplied that they were not offering a fair wage. Our district rate in normal years is Rs1-12 and they offered only Rs1-8. They argued that supply and demand would adjust. I pointed out that at rates which grain was then selling at, workers would have to turn out double the work to secure same pay, and that there was a limit to human endurance. They raised their rates from time to time to Rs1-12, Rs2 and finally towards end of famine to Rs2-8, but the professional earth-workers had left. We had only one work going nearer than 10 miles, and that was closed as soon as their rates were raised. Our works in no way interfered with their supply, as their rates would not induce workers even from the affected area of 250 square miles north of Grand Trunk Road, where we had no work of any description. It should be understood that the railway gave the work out to petty contractors.
134. I do not.
135. They were below the normal rates at first and did not follow the rise in the price of grain.
136. I believe them to have been insufficient at the time when the complaint was made.
137. Professional labourers will always go to a work where there is no limit to their earnings provided rates offered are fair.
138. To a very small extent by zamindari works only. They gave work for about 2,000 people from March to June.
(2) No.
139. Not in this district.

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(President.)—How long have you held your office?—Eight years.

In the district of Shahabad?—Yes.

Then you are very well acquainted with the whole district I suppose?—Yes.

Was there any necessity for relief in your district?—I think it was always recognized that relief would be necessary in the Bhabhua Sub-Division though not elsewhere.

That is because the rest of the district is protected by canals?—Yes.

Is that true of the whole of the rest of the district?—I think so. One or two small pieces are not protected, but generally they are.

Are the canals freely used in ordinary seasons?—Yes.

And much more used in dry seasons?—The demand is very much greater of course.

Was the project of famine relief works ready at the commencement of the famine?—Yes, in Bhabhua.

They consisted of roads?—Yes, almost exclusively of roads.

Metalled roads or *kutchas*?—*Kutchas* roads.

It consisted in raising roads?—Yes, we improved and raised village tracts and low-level roads.

(Mr. Holderness.)—Have you money enough to keep them up?—I think it is very doubtful; they are Local Boards' roads which the District Board took over and they now go back to Local Boards.

Will these raised roads interfere with the drainage of the country?—That point has been thoroughly worked out, our calculations have been made, we left openings to pass spill water through.

Did you take part in the conduct of the works done as famine relief?—The whole of the works were under my control. In Bhabhua they were under what I may call professional civil agency.

Did the gangs often fail to do their tasks?—Yes, frequently.

Were they put on the penal wage?—First on a minimum wage and then on the penal wage.

What reason do you suppose there was for their often failing?—I think for some time the people were content with a minimum wage, it was sufficient to maintain them.

Why?—At the beginning they probably had some very small reserves. I found there were certain gangs who never worked up to the maximum and who were steadily fined.

Was it their own fault that they failed?—Yes, they were contumacious people.

(President.)—Were the people not accustomed to the work?—It was not professional earth-work labour.

(Mr. Bourdillon.)—Is the difference between the maximum and minimum wage considered sufficient?—It is very strongly held in the district that the difference between the maximum and minimum daily wage is a great deal too small.

The A Class labourers did not go to relief works?—The professional labourers went away.

Where did they go?—Some to Lower Bengal and some to Orissa.

What railways did you have here?—The Mogal Sarai-Gya Railway.

Were there any complaints that labour did not go to the railway?—Yes, we received complaints from the railway authorities. They complained that our works were too close to theirs, and that our rates were too attractive, so that they could not get labour for their embankment work. We replied that they were not offering a fair wage. Our district rate in normal years was Rs 12-0 a thousand and they offered only Rs 8. They said that the supply and demand would adjust itself. I have answered the question fully in my written replies to the Commission's question.

Did you ever take any particular account of the professional classes?—No.

The fact is that they had not come to your works and did not go to the railway?—No, they migrated from the district.

(President.)—Did they take their women and children with them?—No, they left them behind.

Do you believe that professional labour will always find remunerative work elsewhere?—They migrate every year from our district.

Are they not at work in the fields during the ordinary seasons?—For certain seasons, and they migrate for certain seasons.

The time that your relief works were on is the time they ought to be engaged in agricultural operations?—No.

What months were your operations on?—The maximum was reached on the 17th of April.

Do you recommend that dependants should not be paid on the work?—Yes, it leaves the door open to a lot of dishonest practice.

Suppose they went to relief centres?—I think a great many were too old and decrepit to reach relief centres by themselves.

(Mr. Holderness.)—Did you ever think of starting piece-work?—No, we never found the necessity. I would prefer it to task-work for numbers over 3,000. Generally my establishment was a professional establishment and not picked up haphazard, so it is scarcely a fair test for other districts. We found that with professional control we could look after a number up to 3,000 on one work; beyond that I think it will be necessary to have piece-work.

If you had had piece-work would you have got more work?—No, I don't think so.

(Mr. Bourdillon.)—You were asked?—Yes, and I said I should not like piece-work, having already trained the staff to task-work.

(Mr. Holderness.)—At the commencement of a famine would you start task or piece-work?—I think that piece-work generally speaking would be preferable if you could get the people to come in, but there will be the difficulty of getting people to attend. I refer to large works employing more than 3,000.

You are in favour of the Code system even when you start test works?—I don't think that task-work is a true test.

What better test would you have?—A distance test would be better, but even that would bear hardly on certain people.

At the commencement of a famine, after you opened works, would you open them under the task or piece system?—I think piece-work would be preferable for large works.

With a maximum wage or allow them to earn what they could?—I think I would have piece-work with a maximum wage.

Do you think as far as possible you ought to try to have a distance test?—I think it would bear hardly on deserving people; at the same time I think some such test necessary.

If you had a few works?—Yes.

You had not many works?—Seven at one time, nine altogether.

Were the seven scattered?—Not very.

Did the people reside on the works?—A number did.

(President.)—As regards the professional diggers who went away, did they belong to the digging caste?—Yes.

What caste?—Noonahs, Binds and Kewots.

Don't these men work with their women and children?—They don't take their women and children with them.

(Mr. Holderness.)—Are there any District Board works open at present?—Very few.

Is there still any demand for employment among the people?—The ordinary demand.

Have they recovered themselves?—I think they have recovered.

(President.)—Were there any people of the higher castes on your relief works?—No, no high class people.

Perhaps there are very few of the high class in the Bhabhua District?—There are in the north (*rahi*), not in the rice-growing area.

Were there any people sent to relief works who should have been relieved in their villages?—I don't think so.

(Mr. Holderness.)—Were the women on relief works in the great majority?—Yes.

Was there any difficulty about diggers?—We made women dig.

Then you classed them as "B"?—We classed them as diggers.

And paid them the "B" wages?—Yes, as males.

(President.)—You had to supply them with tools?—Yes.

(Mr. Bourdillon.)—As a matter of fact you didn't require so many carriers?—No.

At first did you put on more carriers than were necessary?—We didn't make up the gang; we allowed them to do it.

Did you limit the number of carriers?—We had pits which would only accommodate a certain number; if they were overcrowded some of the people were turned off and we gave them other pits to work in. The pits were marked out the day previous.

How did they lodge at night?—Some went home, some remained and were lodged in huts.

(President.)—Had you much sickness among the workers?—No.

How did people get fuel for their food?—They picked it up in the fields; there was a good deal of the old paddy crop which had not been cut down; they also used dried leaves.

What time of the day did they stop work to cook their food?—About 7 or 8 o'clock. They would stop in the middle of the day in very hot weather.

Did they eat twice a day?—Yes; a very small meal in the early morning, and they took their dinner in the evening.

Is there any scheme for irrigating or protecting this Sub-Division likely to be brought forward as far as you know?—There is a scheme on the tapis for irrigating a portion of the Sub-Division from the river Karamnassa.

In your written evidence you make recommendations for the maintenance of a complete record of the *modus operandi*. I suppose you would yourself have no difficulty in preparing such a record?—None whatever, especially now when everything is fresh in one's mind. When the last famine started we could get no clue as to how large a staff was required, etc.

I suppose the famine reports will give a vast amount of information. Your record would give it in much greater detail?—Yes, and in a more consolidated form.

(Mr. Holderness.)—You attach little value to village tanks?—Very little.

Are they any good for irrigation purposes?—No.

Are they useful for watering cattle?—Yes, in ordinary years they may be.

(Mr. Bourdillon.)—There are very few tanks in the district?—Yes.

(Mr. Holderness.)—Do you have any difficulty in preventing persons not requiring relief from coming on to relief works?—It is very difficult to find out if they have any resources.

(President.)—I suppose the mere fact of their coming shows they were more or less hard-up?—I don't think so, not when the soil is light and the village is near, the people earn a minimum wage and go back to attend to their fields.

(Mr. Holderness.)—If you had no minimum wage you would get over that?—Yes. I don't think they would come for a penal wage.

If you gave a wage strictly according to results that would exclude them?—Yes.

Then you think it would be a good thing to do away with the minimum and penal wage and pay by results?—Yes.

Cannot you provide for this by tasking the weakly people separately?—It would require a large establishment, and leaves a good deal of power in the hands of the officer in charge.

(Mr. Bourdillon.)—You have had no practical experience?—No, none of piece-work during this famine.

(President.)—What was the minimum wage?—Nine pies.

I suppose in ordinary years you would not get Assamis to come?—In certain seasons they would, provided the works were at their doors.

What is the ordinary wage of a coolie paid by a private individual?—I don't know.

By Government?—Two annas a day.

(Mr. Bourdillon.)—Private employers generally pay in kind?—Yes.

(Dr. Richardson.)—How many people does the cultivator support on 2 annas a day?—The man usually has a small store of grain in reserve and the 2 annas is for extras. He may have a wife and two or three children.

The labourer employed on the work got 2 annas. How many would he support on that?—Probably his wife would work and each member of the family would earn something or other.

Is that a sufficient wage to keep them going?—If the wife could do anything that would keep them going, but it depends upon the size of the family.

He would not accumulate anything?—No, the coolie does not generally.

In case of pressure they would come on to relief at once?—Yes.

(President.)—Was there any rise or fall in the wages of labourers in connection with the rise of food-grains?—None came under my notice.

Some native witnesses told us they heard that wages went down instead of going up, because there were so many people clamouring for employment?—It is not my experience. It is not governed by the ordinary principle of supply and demand.

(Mr. Holderness.)—I suppose the Mogul Sarai-Gya Railway got contractors?—Yes, but the contractors could not get labour.

Did the Mogul Sarai-Gya Railway raise their rates?—Yes, ultimately they did to Rs 2-8-0, but the professional labourer had then gone from the district.

You have had some experience of aboriginal hill tribes. Has there been any difficulty in getting them to attend works?—No.

Were they amenable to discipline and did they work well?—Yes.

Mr. H. Edwards.

28th Jan. 1898.

Mr. R. H. BENNY, Deputy Commissioner of Palamau, called in and examined.

I put in a written statement of evidence and written answers to the Commission's questions.

Notes on famine administration in the Palamau District for the Famine Commission, in reference to the duties of that Commission, prescribed in paragraph 5 of the Resolution of the Government of India, Department of Revenue and Agriculture, published at page 2918 of the Supplement to the "Gazette of India," December 25th, 1897.

In the district of Palamau, from the very commencement of the relief work operations, the task-work system, minus its complications of maxima, minima and penal wages, was followed, with the one restriction that no

worker was to receive payment for more than 100 cubic feet of earth-work done by him in a single day. The system is practically the same as the Blackwood system of task-work introduced on some of the Public Works Department relief works in the Darbhanga district, as described by Mr. T. Higham, C.I.E., in paragraph 12 of his notes of an inspection of famine relief works in Bengal.

2. When the orders conveyed in the Government Circular No. 87.R. (Famine), dated the 6th May 1897, directing the introduction of the piece-work system, were received, all that it was necessary for me to do was to withdraw the restriction above mentioned, viz., that no worker was to receive payment for more than 100 cubic feet of earth-work done by him in a single day, and to inform all

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workers that they were at liberty to do as much or as little work as they chose.

3. From the above it will be seen that the task-work system, as set forth in the Bengal Famine Code, was never put in practice here, and so we had no practical experience of its working during the late famine. As the Code system appeared to be very complicated and quite unsuited to the circumstances of this district, it was discarded at the outset in favour of the system of payment by results, which was carried out with signal success.

4. I entirely agree with the recommendation of Mr. Higham contained in paragraph 41, clause (e) of his note, that when relief operations are at first started, whether as test or relief works, a strict system of piece-work should be enforced, and as the works proceed it should be left to the Public Works Department, in consultation with the civil officers, to introduce appropriate modifications suitable to condition, custom and capacity of the workers.

5. The detailed recommendations of Mr. Higham for simplifying the present Code regulations on the task-work system, as succinctly stated in paragraph 3, clauses (1) to (6) of Resolution of Government of India, No. 31-237-2F., dated the 25th October 1897, have my approval, and the Bengal Famine Code should be modified on the above lines.

6. The dependants of relief workers were, when absolutely necessary, placed on the gratuitous relief list, but the number so placed was very small. As the district abounds in jungle edibles, those who in other districts would have sought gratuitous relief, in this district employed themselves in collecting such edibles, which formed a substantial supplement to the food earned by the able-bodied members of the family at our relief works.

7. As the piece-work system had a fair trial in this district from the very beginning, and proved a success, it is desirable that this system should be more extensively introduced, especially in the early stage of a famine, and when the relief works consist of works of permanent public utility, as suggested in paragraph 37 of Mr. Higham's note.

8. It is also apparent that the present Code system is very inelastic and fails to adapt itself to the varying circumstances of diverse cases. It is quite clear that one or other of the different systems mentioned by Mr. Higham in paragraph 41, clause (k) (i to vi), may be found desirable for adoption on relief works according to the circumstances of the case. It is desirable, therefore, that the Bengal Famine Code should make provisions for all these different systems. Section 52 of the Bengal Famine Code should be modified accordingly.

9. The famine relief works carried on here during the late famine consisted of road works, construction and repair of reservoirs, embankments and water-courses, and excavation and deepening of tanks and wells. The works were chosen with the view that expenditure should be of permanent benefit to the district and help towards its commercial development and agricultural security, and also as far as possible to keep people employed near their homes and to prevent disintegration of villages. The works were "minor" works according to the definition of the Famine Code, and were carried on by the Civil Department without the assistance of the Public Works Department. If the Public Works Department could have been spared to take charge of the relief operations in this district, it would have been possible to start a few "major" public works at a few centres to which distressed labourers could have been drafted. This would also have relieved the civil officers of a mass of petty details in connection with the management of the relief works, which would have been relegated entirely to professional officers and would have left the civil officers more time for the other important duties which are so pressing in times of famine. As it was I had no option but to start "minor" works, which have some disadvantages of their own, such as necessity of more establishment, supervision of numerous and scattered works, difficulty in enforcing strict discipline, and then again—the works being close to the villages—the useful distance test remained practically inoperative. However, those minor works near the houses of the labourers had this advantage, *viz.*, that we had only a few dependants of relief workers to relieve. There is no doubt, however, that large works are preferable to small works as the backbone of famine relief, whenever the necessity arises for employing relief labour on an extensive scale and the services of the Public Works Department can be utilized.

When the works have to be solely in the charge of the Civil Department, it is better to take up "minor" works. Such works are also preferable where there is fear of epidemic diseases breaking out in relief camps. And in the later stages of famine operations "minor" works should be preferred. Section 53, paragraph 2 of the Bengal Famine Code, should be amended accordingly.

10. As already stated in the preceding paragraph, civil officers were in sole charge of the relief works here, without the assistance of the Public Works officers. The District Engineer, with three temporary overseers, supervised the professional part of the works.

11. I agree with Mr. Higham that, in case of large works requiring constant and close professional supervision, the officer in charge should be an Assistant Engineer or senior upper subordinate, and the special civil officer should act under his orders as assistant officer in charge.

12. During the famine relief operations I had to post an overseer to each Divisional Superintendent's charge. These overseers worked under the orders of the District Engineer and supervised the professional part of the works. I was obliged to adopt this course, as I found that the Charge Superintendents imagined themselves engineers, and began to issue orders which in some instances, if carried out, would have resulted disastrously. I therefore go further than Mr. Higham, and consider that the duties of Inspectors of Relief Operations, or, as they are now styled, "Charge Superintendents," should not extend to the supervision of works, and of labourers employed thereon, carried on under civil agency, as contemplated by clause (e) of section 31 of the Bengal Famine Code, when such works are earth-works of any kind, but that all such works should be placed under the District Engineer. These Charge Superintendents make useful sub-treasury officers and circle auditors, and may be usefully employed on the other matters enumerated in section 31; but with anything requiring professional skill, such as road, tank and reservoir-making, they should have no concern, for simple as these works appear at first sight, in practice it is found that nearly in all instances a professional man's opinion or supervision becomes necessary at some time or other in order to ensure complete success.

13. As stated in paragraph 6 of the Government of India Resolution No. 31-237-2F., the District Officer should have a voice as to the opening and closing of relief works in his district, as to the substitution of piece-work or modified task-work for the task system of the Code, and as to purely non-technical questions connected with the management of the works.

14. I approve of the forms of the statistical returns suggested by Mr. Higham in Appendix II of the final report. Of course, it is advisable that the periods adopted for statistical and account purposes should be synchronous. The half-monthly periods suggested by Mr. Higham in paragraph 8 of Appendix II have my approval. The forms of the Works Abstract, Parts I, II and III, are necessary and are simple.

15. With reference to paragraph 11 of the Appendix II, I beg to suggest that the Divisional Officer should submit to the District Officer a copy of his half-monthly progress report to the Superintending Engineer, and the latter should furnish the district abstract to the District Officer as well as the Commissioner. It is desirable that the District Officer, whose responsibilities in connection with the relief operations are supreme, should obtain all information about the same.

16. With reference to paragraph 12 of the Appendix II, I beg to suggest that for works carried out by civil officers, Part II of the Works Abstract should be maintained in addition to Part I, as Part II contains most useful information, and the civil officers may be called upon to undertake most important works on account of the paucity of officers of the Public Works Department.

17. When payment of relief works is made in grain purchased by Government, as was the case of this district, grain detailed bills should be called for from the circle officers, and forms for these should be prepared and incorporated in the Famine Code. The forms drawn up by me in this connection, and used in the late famine, are annexed herewith. I entirely agree with the proposal of Mr. Higham contained in paragraph 41, clause (F) of his report, regarding the desirability of appointing a committee of experts for considering the question of relief work accounts.

18. For the purpose of administering "gratuitous relief" under Chapter V of the Famine Code, I appointed a

committee at the head-quarters of each police-station and outpost, composed of the chief zamindar of the jurisdiction as chairman, two or more of the respectable inhabitants as members, and the principal police officer as member and treasurer. To each such committee I gave a permanent advance.

19. As each committee was formed it commenced work by making a house-to-house enquiry throughout its jurisdiction for all lunatics, cripples, blind, decrepit through age, and those disabled from other causes who had no relatives or friends able to support them, and entering them in Register No. XIII.

20. As under the above system the recipients would naturally be scattered, and could not be brought together without an amount of hardship not called for by the gravity of the situation, the committee appointed, in each village containing one or more registered recipients, a "punchayat" consisting of two or three respectable members of the village community, and to this punchayat paid over a sum of money sufficient for the maintenance of the recipients for 20 days, with instructions to pay daily to each such recipient the sanctioned money dole. About every 15 days or so a member of the committee visited the villages containing recipients and in which a punchayat had been appointed, made enquiries to ascertain that matters were progressing satisfactorily and to recoup the punchayat the expenditure incurred by it during the previous fortnight. In this way the recipients were relieved at their respective homes and the punchayats always kept in funds.

21. From what I have stated above, it will be observed that in the matter of administering "gratuitous relief" a departure had been made from the provisions of the Famine Code, which prescribe that such relief shall be administered by circle officers.

22. The reason of this departure was that the district is very large in area, and the relief work circles were few and scattered. If, therefore, circle officers had been appointed for the charge of gratuitous relief circles, they would have been, in addition to the circle officers, in charge of relief works. By the system introduced by me Government have been saved much expense, and I believe the administration of gratuitous relief was more satisfactory than if it had been left in the hands of specially appointed Government agents on small salaries. I beg to suggest that the system may find a place in the revised Famine Code.

23. In regard to the dependants of workers on famine relief works, there were very few cases in which any such dependants came forward and asked for gratuitous relief; the reason for this being that most of the relief works were carried on in the vicinity of jungles abounding in edible products, and that the non-working members of relief workers' families found it more profitable, considering the very high prices to which food-grains had risen, to go and collect such jungle products which, when added to the earnings (partly rice and partly money) of the working members, provided a sufficient meal, than to beg for the small money doles given as gratuitous relief.

24. The Indian Famine Charitable Relief Fund Committee, with its admirable organization, stepped in and provided for all who were in want and who were not borne in the registers of the gratuitous relief committees. I have no doubt that many of the dependants of relief works also were relieved from the Charitable Fund, but since very few of the recipients from that fund received anything without a *quid pro quo* in some shape or other, such as cotton-spinning and *satoo*-pounding, etc., there is nothing objectionable in this. On the contrary, it was the better plan of the two, for they made some return for the doles received, which they would not have done had they been brought on the gratuitous relief books. The system may find a place in the revised Famine Code.

25. The suggestion contained in paragraph 6 of the Resolution of the Government of India, No. 32-237-3F, dated the 25th of October 1897, has my approval.

Written answers to Commission's questions.

*1. Whole district area 4,905 square miles. Population 600,000. Worst portions, Daltongunj, Gurrah, Paton and Lattybar thanas. Population 316,132, area 2,099 square miles.

2. Local failure of rains and harvests and abnormally high prices. Stoppage of exports from Tributary States and Lohardaga. Indifferent harvests in 1895-96.

3 (a). From a perusal of the rainfall statement given below it will be seen that in 1895 there was very little rain in May; heavy rain for the season of the year in June, heavy rain in July and August, moderate rain in September, slight rain in October and none in the remaining months of the year. The result of this unfavourable distribution was that in that year the bhadoi crop was only an 11-anna one, the winter rice crop a 10-anna one and the rabi crop an 8-anna one; in 1896 there was no rain in May, very heavy rain in June, July, and August, moderate rain in September and no rain in October. The result was that the outturn of bhadoi was only 9½ annas, and that of winter rice 5 annas only. Again, owing to there being no rain in October and none until the last week in November very little rabi crops were sown, and a fair yield was obtained only from those sown in the bed of reservoirs from which the water had been drained off to irrigate winter rice crops. After the rains on the 22nd November large areas were sown with wheat, barley, and gram, but these crops, as well as those sown on high lands in October, were attacked, some by rust and others by crickets and other insects of sorts. The result was that the outturn of the rabi did not exceed 6½ annas. The mahua crop, which promised at one time to be a bumper one, was so seriously damaged by the storms of wind and rain accompanied by thunder and lightning in February and March that only a 6-anna crop was eventually gathered. The mango crop was an absolute failure, the blossoms having been entirely destroyed by the inclement weather in March. With bad seasons and bad crops in 1895-96, and worse ones in 1896-97, it is not surprising that the district was reduced to a state of famine, and what aggravated matters was that all surrounding districts were reduced to the same plight. The position of Palaman, cut off as it is from the outer world, is a very unpleasant one to contemplate at any time, but under the circumstances just described it was a very critical one in 1897-98.

Mr. B. H. Bowny.
28th Jan. 1898.

The following comparative statement shows the actual rainfall in 1872-73, 1873-74, 1895-96, 1896-97 and 1897-98, as compared with the normal rainfall, month by month, at the head-quarters station of Palaman:—

Month.	1872-73.	1873-74.	1895-96	1896-97	1897-98.	Normal.
April	0 90	Nil	0 12	Nil	0 59	0 16
May	0 03	1 54	0 98	Nil	0 40	1 19
June	0 93	3 61	5 48	10 80	2 27	6 24
July	8 52	20 71	10 06	8 56	8 78	13 53
August	8 36	9 30	7 34	11 37	14 76	13 21
September	9 27	5 05	8 49	4 25	9 00	7 61
October	0 43	Nil	Nil	Nil	Nil	3 64
November	Nil	Nil	Nil	1 18	Nil	0 31
December	Nil	0 98	Nil	1 70	Nil	0 27
January	Nil	1 65	Nil	0 42	Nil	0 70
February	Nil	1 79	Nil	1 61	Nil	0 58
March	0 60	0 53	Nil	1 43	Nil	0 60
Total	29 02	44 04	28 50	41 27	...	47 23

3(b). The following statement compares the prices of common rice in the period of distress in 1896-97 with the normal prices and prices in 1895-96 and 1873-74 during the corresponding period:—

Month.	Price in 1896-97.		Normal.	1895-96.	1873-74.	Per cent. of rise of 1 over 2.	Per cent. of rise of 1 over 3.	Per cent. of rise of 1 over 4.
	1	2						
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.			
October	8 11	14 6	12 6	11 34	66	42	26	
November	8 9	15 7	13 12	13 0	90	48	64	
December	9 2	15 7	14 5	13 70	99	56	43	
January	8 11	15 7	14 5	12 90	77	64	46	
February	8 7	14 6	14 10	11 74	70	61	36	
March	8 0	14 6	14 10	12 14	79	63	36	
April	7 2	14 6	13 2	11 53	101	68	56	
May	6 12	12 10	11 13	11 06	90	75	74	
June	6 8	12 10	10 11	11 63	95	64	70	
July	6 6	12 10	10 11	13 47	100	69	110	
August	6 15	14 6	9 9	12 85	144	61	102	
September	8 2	14 6	10 6	13 61	77	28	68	
Average rise per cent.	...	...	...	...	87	61	61	

* The numbers refer to the questions drawn up by the Commission.

Mr. B. H. Renny. The following table furnishes similar figures for comparing the prices of makai :—

28th Jan. 1898.

Month.	PRICES.				RISE PER CENT.				
	1896-97.		Normal		1895-96.	1873-74.	1 over 2	1 over 3	1 over 4.
	1	2	3	4	5	6	7		
	S. Ch.	S. Ch.	S. Ch.	Seers.					
October	12 15	21 6	22 8	19 16	65	55	54		
November	11 13	22 10	17 11	16 77	91	49	43		
December	11 4	22 10	19 2	16 98	101	70	36		
January	10 10	22 10	18 0	15 84	112	69	41		
February	9 9	18 9	18 8	12 94	94	90	81		
March	10 2	18 9	18 0	14 30	83	77	39		
April	8 6	18 9	16 14	16 69	123	90	84		
May	8 1	16 9	16 14	16 67	105	108	86		
June	7 14	16 9	17 6	14 32	110	120	83		
July	8 7	16 9	17 14	16 45	96	111	82		
August	9 9	21 6	15 8	17 71	115	68	83		
September	22 0	21 6	20 4	20 12	...	...	81	
Average rise per cent.	...	...	...	...	89	81	43	

The following table furnishes figures for comparing the prices of wheat :—

MONTH.	PRICES.				RISE PER CENT.				
	1896-97.		Normal		1895-96.	1873-74.	1 over 2	1 over 3	1 over 4.
	1	2	3	4	5	6	7		
	S. Ch.	S. Ch.	S. Ch.	Seers.					
October	8 7	13 1	13 12	10 88	64	63	14		
November	8 7	12 15	13 3	11 05	63	58	30		
December	7 14	12 15	13 3	11 43	64	67	39		
January	8 0	12 15	13 16	11 39	61	61	37		
February	8 2	14 3	11 8	10 24	74	41	24		
March	9 2	14 3	13 7	12 69	65	36	32		
April	8 14	14 3	11 8	12 87	69	29	45		
May	8 8	12 12	11 4	13 06	60	22	52		
June	8 7	12 12	9 13	12 93	61	16	42		
July	7 12	12 12	9 0	12 70	64	16	54		
August	7 0	13 1	9 4	12 83	66	32	71		
September	7 14	13 1	9 13	13 29	65	24	78		
Average rise per cent.					61	39	43		

The following table furnishes figures for comparing the prices of barley during the period of distress with the normal prices during the corresponding months :—

MONTH.	PRICES.		Bise per cent. of 1 over 2.
	1896-97.	Normal.	
	1	2	3
	S. Ch.	S. Ch.	
October	9 13	17 12	77
November	8 7	19 11	133
December	9 13	19 11	100
January	9 11	19 11	103
February	9 9	20 13	117
March	15 11	20 13	32
April	12 12	20 13	63
May	11 8	18 11	64
June	10 5	18 11	81
July	8 12	18 11	113
August	7 8	17 12	136
September	11 4	17 12	87
Average rise per cent.			89

The following table furnishes similar figures for comparing the price of marua :—

MONTH.	PRICES.		Bise per cent. of 1 over 2.
	1896-97.	Normal.	
	1	2	3
	S. Ch.	S. Ch.	
October	12 8	24 10	62
November	12 8	20 4	60
December	12 1	20 4	67
January	12 4	20 4	68
February	11 4	...	...
March	11 13	...	...
April	9 15	...	...
May	...	...	...
June	...	...	...
July	8 11	...	...
August	8 7	24 10	167
September	17 8	24 10	40
Average rise per cent.			88

The price of mahua ruled as follows during the period of distress :—

Fortnight.	Price.
April { 1st	42 5
{ 2nd	23 5
May { 1st	26 18
{ 2nd	23 11
June { 1st	19 14
{ 2nd	17 13
July { 1st	16 0
{ 2nd	14 0
August { 1st	12 9
{ 2nd	12 4
September { 1st	16 0
{ 2nd	15 0

The price of grain rose from 10 seers 11 chattaacks in November 1896 to 7 seers 3 chattaacks in August 1897, the normal prices during the corresponding period being 15 seers 12 chattaacks and 14 seers 14 chattaacks, respectively.

4. I was not in charge of the district prior to 11th November 1896; 1895-96 had been unfavourable.

5. Under normal circumstances the population have sufficient to feed and clothe themselves with, and their ambition scarcely aspires to more than this. The material condition of the people cannot at any time be said to be flourishing.

6. Specially dependent on timely and sufficient rains owing to absence of facilities for irrigation.

7. The reserves of both money and food are never large. The food-crops never yield sufficient food; balance is imported. Reserves of food only sufficient to carry through from one harvest to another. Above applies to all classes, excepting the land-owners. Proportion about 1/3th.

8. Compares badly. The famine of 1873-74 was the severest heretofore. At that time prices reached 11 3/4 seers, whereas on this occasion they fell to 5 seers 15 chattaacks. Again, on the former occasion the famine was not general and Palamu was able to export food to Behar, Tributary States, and elsewhere, whereas on the latter occasion all doors to export were closed owing to the famine being general.

9. I am afraid that the extent of crop failure and the degree of distress and the absence of resources on the part of the people were under-estimated on the present occasion at the beginning and until the end of May. It affected

the character of the relief provided in so far that up to the time stated the Government would not consent to import food. Government apparently would not believe that the people were not capable of helping themselves by importing food, and they also appeared to have underrated the enormous difficulties connected with the question of transport. Hence towards the latter half of July and all August prices ranged very high, and the people suffered for want of sufficient food.

10. The Famine Commission's standard is excessive so far as gauged by Palamau results.

11. Palamau had about 5 per cent. of the population of the affected tract on relief.

12. In my district the proportion of total population relieved was not larger than was necessary to prevent loss of life or severe suffering. No persons were relieved who were not really in need.

13. Yes, a large number of persons of the affected tract suffered greatly owing to their lazy and indolent nature. They preferred starvation to work on the relief works.

14. The relief arrangements were all that could be desired.

15. The mortality was in excess of normal owing to the people becoming emaciated on account of want of sufficient and proper food. They had themselves to blame for this condition of things, as they would not come to the relief works.

16. No such instances.

17. No.

18. I think this principle has been observed to the fullest practicable extent.

19. Yes.

20. We paid by results.

21. The number of persons relieved, otherwise than through the operation of a labour test, was very very small indeed—very few beyond the maimed, the halt and the blind of the district.

22. The task has been a full one, and the wage has not been more than a fair subsistence wage.

23. The distance test was not applied here—see my former note.

24. No.

25. See above.

26. Such was not the case in Palamau.

27. See my former note.

28. The risk was effectually prevented and gratuitous home relief was strictly confined to persons who were in real want and who belonged to the classes specified in the Code.

29. See my former note. It was very sparingly given here.

30. Five hundred and six thousand six hundred and ninety-five relief workers were relieved at a cost of Rs4,636-12-3 (i.e., 1 anna 8 pies per head per diem), and 153,941 persons were relieved gratuitously at a cost of Rs27,079-12-4; so that altogether 960,636 persons were relieved at a cost of Rs1,716-8-7. The cost per head per diem is 1 anna 4 pies.

31. Rupees 23,000 were advanced under the Agriculturists' Loans Act, and Rs43,125 under the Land Improvement Loans Act (famine conditions). This latter sum was utilized for the purposes of relieving distress. I am unable to say how these amounts compare with similar relief given in former amines. I don't think such loans were ever given on former occasions.

32. The cultivating non-proprietary class and the agricultural labourers found relief on the State relief works and also on private works carried on by the land-owners either from private funds, or from funds borrowed from Government under the Land Improvement Act (famine conditions). The former were also able to purchase seed and carry on cultivation by means of the advances under the Agriculturists' Loans Act.

The trading classes received loans from Government for the purpose of importing rice from outside the district; the loans aggregated Rs2,500, and, further, they were paid a "bounty" of 8 annas a maund on all rice so imported. Rupees 9,895-10-10 were paid as bounty.

The artisan classes were relieved solely by the Charitable Relief Fund, who found them the wherewithal to earn a subsistence by plying their respective callings.

33. The relief measures prescribed by the Code are not defective, but they should be more elastic so as to be able to meet special requirements. I fancy the requirements of each district vary considerably. As regards Palamau, had the provisions of the Code been strictly enforced, the results would not have been so satisfactory to the people and would have entailed enormous extra cost to the State.

34 and 35. The arrangements existing in Palamau for reporting failure of rainfall and crops are not sufficient. The Police question chaukidars on parade days, and report the result in the weekly weather and crop reports. I have obtained sanction to the establishing of more rain gauges. In a backward district such as this it is difficult to suggest any improvement. It might improve the state of things if *gurus* of primary schools, who are in receipt of stipends from Government, were made to submit postcard crop reports weekly when failure is apprehended.

36. No, the crop returns which are submitted by the Police cannot be relied on. They are mere guess works of chaukidars as a rule.

37. The returns are submitted weekly.

38. No, in November 1896 I deputed selected officers to make enquiries into the stock of food and the condition of the crops, and I obtained from every market in the district, on the day the market was held or the day following, a price-current of food-grains. It was on information thus collected, as well as from personal observations and information derived from zemindars, that I based my relief arrangements during the late famine. The agricultural information furnished by the Police was not neglected; it was tested when necessary and action taken when required.

39. (1) Minor works under Civil agency.

(2) Gratuitous relief, both described fully in former note.

(3) Advances under Land Improvement Act (famine conditions).

The annexed statement shows the nature of works undertaken by the Palamau zemindars, the period during which the works lasted, the number of persons relieved and the amount spent by each zemindar. Total expenditure Rs47,851-14-3. The above does not include Rs43,125 taken as advances under the Land Improvement Act.

40. As District Officer I controlled everything.

41. All were Code measures, but mode of working differed; this has been fully described in the former report.

42. We had no poor-houses and kitchens. No necessity for such arose owing to peculiar circumstances of district.

43. This has been answered in the former note.

44. This has been done in the former note. There were no deaths due directly to starvation. There was much economy.

45. My suggestions are made in former note.

46. All the measures are suited for a district such as Palamau, but are not susceptible of general application. I have asked that the Code may find room for this as special, not general, application.

47. What was done in Palamau could, I think, be done in the Singhbhum District also. I am not aware of any other tract in which they could be worked.

48. The payment by results, i.e., piece-work system, as enforced here, was not approved by the lazy and indolent people of this district, who either went off to the private works where supervision was less stringent, or took to thieving. All classes in distress and the intelligent natives not themselves in distress are loud in their praise of the gratuitous relief system as worked here.

49. All I had to suggest I have suggested in my former note.

52. I cannot answer this question without the help of my District Engineer. I received these questions too late to be able to call in his assistance.

53. The roads, if finished and maintained, would be of permanent service to the community, but none have been entirely completed, and the funds of the District Committee are insufficient for the purpose of finishing and maintaining them.

54. Even if the roads now constructed are completed and regularly maintained, there is still room for many new roads. I estimate that about 200 miles of new roads could be proposed.

55. We did very little in this direction, but I consider metal collection a satisfactory means of employing relief

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Mr. R. H. labour. It is work that can be easily checked, and is suitable to able-bodied labourers.

Kenny. 56. No, we did not start this work until late, and did very little.

28th Jan. 1898. 57. (1) As a means of employment of relief labour it proved very satisfactory in every way.

(2) Those we undertook were all of permanent benefit to the villages. Water is very scarce in Palamau, especially in the hot weather, and all tanks in which springs were struck are greatly prized by the people. No tank should be undertaken where there is no chance of finding water at a reasonable depth.

59. There are very few tanks in Palamau. Water is obtainable chiefly from wells and streams. This question is not therefore applicable.

60. See above.

61. Reservoir construction was largely adopted in Palamau.

62. Certainly. They are constructed for the benefit of the village generally, not for the lands of any particular individual, whether land-owner or tenant.

63. Yes, in Palamau, where the country being undulating, the facilities for constructing impounding reservoirs is great, unlimited in fact.

64. One or two irrigation channels. I have not separate figures by me, but the approximate cost was not more than Rs. 2,000.

67. I know of one such project, but it is situate in a revenue-free estate, and so the cost of maintenance would have to be met by imposition of a water-rate, and not from increase of land revenue. I refer to the impounding of the Karabar Nuddi in Pergannah Japla.

70. The Code has been so far observed that works entered in the programme only were undertaken. No plans and only rough estimates of the works entered were prepared.

71. The distance test was not applied in Palamau.

(a) People came and went from a radius of about 5 miles.

(b) No accommodation was provided.

72. In Palamau it is difficult to get the people to attend State relief works, where supervision is strict, even when such works are at their door. I don't think they would go to distant works.

73. I don't think the Palamau people would go long distances.

74. Residence on works was not enforced at all.

75, 76 and 77. In my former note I have referred to the advantages and disadvantages of small and large works.

Task-work and piece-work.

This section has been dealt with in my former note.

114. There were no Public Works officers employed in the Palamau District.

124 (i) and (ii). I have dealt with this subject in my former note.

125. We did no task-work pure and simple.

126. Circle officers made all payments.

127. No such case.

128. No aboriginal hill tribes on Palamau relief works.

130. We opened no kitchen, and had only to pay money doles to a few children brought on the gratuitous relief list.

132. See my former note.

133. No.

134. See above.

135. See above.

154. I have dealt with gratuitous relief, as administered in Palamau, in my former report.

175. No poor-houses were opened in Palamau.

185. Relief was given in the houses of the people. No relief centres.

193. No relief kitchens.

	Rs.
199. To land owners	43,125
To cultivators for food-grain and subsistence	23,000

200. Spent on objects for which it was lent.

201. Very great benefit. Yes, more money could have thus been advantageously spent.

203. No advances for purchase of food.

204. I think that the cultivators requiring subsistence money should be required to submit to the self-acting test of accepting work on a relief work.

205. I would aid cultivators possessed of some property in land and cattle with advances, rather than offer them work and wages. I think it would be more economical.

206. I would only advance to well-known cultivators of respectability, and not to the common herd.

213. No suspension or remission of land revenue. In the Government estates the collections have been backward with their rents, and measures for recovery have not been put in force to the extent usual in such cases in normal years.

216 and 217. All reserved forests were thrown open for the collection of edible fruits, roots, and grass seeds. It was not necessary to throw them open for grazing as they are situate where there is much waste land and only a sparse population. The fruits, roots, etc., were a material help to the people.

218. No.

219. Edible fruits, blossoms, and roots, also numerous "ságs."

220. None.

221. None.

223. No.

224. I see no objection to the second object.

225. Yes, certainly.

226. Ordinary precaution and care, but no special rules or measures necessary.

227. I see no objection.

228. If the number were limited as proposed, I don't think they would interfere. No, such shops were opened in Palamau.

229. Not aware of the opening of any such shops.

230. I think so.

231. Those who owing to severe scarcity and high prices of food have exhausted their stocks of both food and money, and are unable to obtain either, excepting on terms which would reduce them to bond-slaves for the rest of their lives.

232. No, certainly not.

233. Only in cases referred to in answer to question 231.

234. See my former note.

235 and 236. The funds of the Charitable Committee were utilized on the following objects, *viz.* :-

(i) In supplying clothes and blankets to the destitute, 2,440 persons, at a cost of Rs. 1,343-4-3.

(ii) In supplementing the doles granted by the Gratuitous Relief Committees to sick in hospitals; average 10 persons daily; cost Rs. 325-6-5.

(iii) In supporting orphans, 4, at Rs. 40-2-6.

(iv) In forwarding orphans to their relatives residing at a distance.

(v) In maintaining the respectable poor by money doles; daily average 285 persons; cost Rs. 4,755-9-6.

(vi) In providing employment in the shape of cotton carding, cotton spinning, chhatoo pounding and cloth and carpet weaving to those who are unfit to attend Government relief works. Two-hundred and twenty-six cotton spinners were on an average relieved daily at a cost of Rs. 963-13-0, and 586 chhatoo pounders were on an average daily relieved at a cost of Rs. 305; two carpet weavers were relieved daily at a cost of Rs. 7-12-6; 20 cotton carders daily at a cost of Rs. 141-2-5; 84 weavers daily at a cost of Rs. 632-8-7.

(vii) In making loans and gifts to needy cultivators, 2,094 agriculturists received loans, amounting to Rs. 8,174, and 2,463 others received gifts for purchase of seed, amounting to Rs. 5,598, and 514 persons received Rs. 1,291 to enable them to carry

on their cultivation. The expenditure stands classified thus—

		R	a.	p.
Under Object No. I	..	1,673	10	8
" " " II	.	40	2	6
" " " III	.	6,024	6	6
" " " IV	.	15,844	7	6
Miscellaneous . . . .	.	2,287	6	9
TOTAL	.	25,870	1	11

237. All forms given were equally popular.

238. Chhatoo pounding.

239. Yes.

240. I think so.

241. I cannot.

242. Permanent advances were made to all officers in charge of police stations and out-posts. The number was not large.

243. There was not much wandering. Jungli people or people with whom it is a custom to migrate at certain seasons of the year did not take to wandering.

244. No.

245. Chiefly from Mirzapur in the North-Western Provinces. They were so few that I can ascribe no reason in particular for their coming to Palamanu.

246. No.

247. Made to do work on relief works if not physically incapacitated, and in the latter case he sent to a poor-house.

248. 33.91 for five-year period, 1891—95.

31.21 for 1895-96 } Famine year, from October to
36.40 for 1896-97 } September.

I cannot supply figures for calendar years.

249. The higher ratio in 1896-97 (famine year) was due to indirect effects of scarcity of food to the extent of 7 per cent. over the normal of five years, 1891-95.

250. No answer.

251. In 1895-96 the death-rate was 31.21, so in 1896-97 the increase was 16 per cent. over the figures of that year. I do not feel in a position to answer the latter part of this question.

252. I must leave this to be answered by a medical witness.

253. I have figures for dysentery and diarrhoea, but not for bowel-complaints. The ratio of the above is very small.

254. The relief workers got sufficient to maintain them in health. We did not open any poor-houses or kitchens.

255. There were no deaths directly due to starvation, cannot give the number who died indirectly from privation, and cannot say whether the mortality was greater amongst women than amongst men, or amongst children and the aged than amongst adults.

No cases of abandoning children.

256. No death from starvation.

257. There was no mortality amongst the people in receipt of State aid. We had no relief camps, poor-houses or kitchens.

258. We had only the ordinary district staff, which sufficed under our peculiar circumstances.

278 to 281. No famine relief poor-houses and kitchens.

282. I think that the former was the case.

283. I consider that there has been a permanent rise in the average price of food-grains within the past 20 years, but am unable to say if the fall in the value of the rupee has had anything to do with this result.

283(a). I was on furlough, so cannot say.

284. In Palamanu the grain dealers exhibited no activity. There are none beyond petty dealers in the district.

285. At the prices quoted at the hâts, but not at all times owing to smallness of stocks exposed for sale.

286. No, not always. We paid from the commencement half in cash and half in grain. Grain in the hâts was both scarce and expensive.

287. No exportation of any food-grains.

288. No fortunes were made in Palamanu.

289. The grain pits or godowns of grain dealers were opened and depleted at the close of the distress.

290. No surplus stocks.

291. Cultivators had no grain to sell.

292. No such dealings.

293. The habit exists but to a very limited extent. I know of no diminution.

294. No Railways.

Private trade is very insignificant, and can give no material assistance.

295. To a limited extent.

296. Cultivators, agricultural and other labourers, and the poor and helpless.

297. Depletion of money owing to a long period of scarcity and high prices. Yes.

298. Wages of labourers and servants went up, but not of artisans, of which the number is limited and demand small, and wages always high.

299. Not as far as I have observed.

300. I cannot. It is universally stated that during the late famine all classes had less power of resisting destitution.

302. There is very little jewelry worn in Palamanu, but cattle were sold to a large extent.

303. Both bounties and loans were granted, but without lowering prices.

304. A grain dealer of Gaya and some petty traders of Palamanu.

Mr. E. H.
Benny.
28th Jan,
1898.

Mr. R. H.
Kenny,
28th Jan.
1898.

Statement showing the private works undertaken by the Zemindars of Palamau.

No.	Name of Zemindar.	Nature of work.	Date of commencement and completion of the work.	Number of days.	Total number of coolies.	Daily average number of coolies relieved during an average of 161 days.	Amount spent.	REMARKS.
1	2	3	4	5	6	7	8	9
							R a. p.	
1	Raja Bhugwat Dyal Singh, of Champur . . .	Gilandazi, bandh, sinking well, etc. in several mauzas in his ilaqua.	29th January 1897 to 31st August 1897 . . .	215	258,025	735	18,207 14 0	
2	Babu Kishen Bux, Rai Bahadur, of Nawa Jaipur	Ditto ditto . . .	March to June 1897	122	25,704	227	2,412 11 0	
3	Bhaya Dirgaj Dev, of Untari	Ditto ditto	7th December 1896 to 21st June 1897 . . .	190	67,211	354	6,540 2 6	
4	Babu Bhugwat Bux, Rai Bahadur, of Bistrampur	Gilandazi and bandhs	January to June 1897	180	18,000	100	1,020 0 0	
5	Kuer Laljiwan Singh, of Ladi	Ditto ditto	December 1896 to June 1897	210	20,160	96	3,211 14 0	
6	Babu Ram Saran Singh, of Selidag	Ditto ditto	2nd February 1897 to 15th March 1897 . . .	41	2,550	62	177 9 9	
7	Rai Gobind Prasad Singh, Bahadur, of Ranka . . .	Gilandazi, bandh, well in several villages in his ilaqua.	January to July 1897	210	83,925	399	14,604 11 0	
8	Babu Harsahai Lal, of Chatterpur	Gilandazi and bandh in his mauza at Chiror.	April to July 1897	120	13,440	112	1,630 0 0	
				1,288	489,015	2,085	47,854 14 3	

(*President.*)—How long have you been Deputy Commissioner of Palamau?—I joined on the 10th November 1896, but I was there in my younger days when Palamau was merely a Sub-Division of another District.

What public works establishment had you in the Palamau District?—A District Engineer and one Sub-Overseer. When the famine commenced Government sent me three Overseers and two Sub-Overseers. We had also private relief works. Zemindars carried on works under the famine conditions of the Land Improvement Act.

(*Mr. Holderness.*)—You had the piece-work system all over?—We paid by results from the commencement, with the restriction that no labourer was to get payment for over 100 cubic feet.

It was piece-work subject to a maximum?—Yes.

You found that sufficient?—Yes, for my district. It was sufficient but for the fact that the food supply ran short.

What did you do then?—We had the bounty system also. Palamau is about 110 miles from the nearest railway station, and Government at the end of May decided to send us rice. They sent it in the first instance to the Collector of Gya, who sent me a small quantity, and then the whole thing broke down. He sent the balance to Baroon. We tried to get it up the river but could not manage it.

How much rice was imported by Government?—About 15,000 maunds, but 7,000 maunds only reached the district and most of that reached too late to be of use for payment to relief labourers and recipients of gratuitous relief.

How much came under the bounty?—Over ₹9,000 was expended on bounties, and then I advanced ₹53,000 to traders to bring in rice.

Did they bring in rice?—Yes.

Did that do good?—Yes.

Generally, where does food come from?—From the Sirguja State and from Lohardagga. In November Sirguja shut their doors; Lohardagga helped us to the end of February. In January 1897 we asked Government for a lakh of maunds of rice and they declined. If they had sent it there would have been no difficulty.

In spite of that you pulled through?—Yes, but the people suffered tremendously in July and August.

On account of the scarcity of food?—There was no food to be had.

Could it not be bought?—You see this was the second year of scarcity.

There was no food in the bazars?—In August very little.

Did your death-rate go up?—Tremendously, about 7 per cent.

Last August and September was the death-rate high?—Yes.

It was not due to starvation?—There was a severe outbreak of cholera, indirectly due to scarcity; the people were so emaciated that the least thing killed them.

Excluding cholera there was no excess mortality?—If there was it was very slight.

(*President.*)—Still your impression was that the excess mortality was due to privation?—Yes, that is what the medical officer says.

(*Dr. Richardson.*)—That weak state was the consequence of an insufficient supply of food?—Yes.

And improper food?—A large portion lived on jungle produce.

Food could not be had in the country?—We tried to obtain it from outside and failed.

And the privations of the people were due to that?—Yes. See attached photographs which show instances of the state to which the poorer classes were reduced from sufficient and improper food.

And owing to that privation the mortality, not directly, but indirectly, went up?—Yes, in the months of June, July, and August.

Was that before the rains?—During the rains.

Of course the rains would cause sickness of themselves?—Yes.

(*President.*)—What is the common food-grain?—Rice in the Palamau District generally, in the hilly parts *bhadoi* crops.

What are they?—Indian corn, gundli and marwa and sawan.

(*Mr. Holderness.*)—If Government had imported a lakh of maunds, how would you have dealt with it?—My idea was to start depôts and sell it to anybody who would buy, for instance, banias; the whole of the trade is done through the markets where the people come to purchase their food.

Having got this rice, your idea was to sell it to local traders?—To anybody who wanted to buy it.

How would you fix prices?—Simply to cover cost.

Is there any grain trade in Palamau?—When the bounty system was first started no one would come forward; we eventually got a man from Gya, and it was only when the others saw that he was making a good thing that they came forward and asked for advances, I advanced them up to ₹53,000.

(*President.*)—How did the rice come in? On pack-bullocks?—Yes, and in carts and boats.

Did the pack-bullocks belong to the people themselves?—To the trading class at Palamau.

Is the produce of Palamau ample for its requirements?—No, the food-supply is never sufficient for the district. We have to depend on Sirguja and Lohardagga.

Is Sirguja a fertile tract?—Yes, they produce more than they require.

What did prices go up to?—Five seers 14 chatta was the highest for rice.

What was the grain that did come in?—Mainly Burma rice. The mahajans asked for permission to buy rice, which was advertized for sale in the Burdwan district, and they got some of that and some from the Arrah district. It was chiefly Burma rice.

Did you advance much money to the cultivators and landlords?—I gave the landlords ₹43,000 and I advanced the cultivators ₹23,000.

(*Mr. Holderness.*)—The amount you gave the landlords was for land improvement?—Yes, under the famine clause of the Land Improvement Act.

And as regards the ₹23,000 given to the cultivators, was that for good grain?—Yes, I gave them another ₹15,000 from the Charitable Relief Fund, partly as a loan and partly as a gift.

As regards the ₹43,000 given to landlords, are they to repay two-thirds?—Yes.

Did that do much good?—Yes.

Were the works carried out an improvement?—Yes, chiefly impounding reservoirs.

Did the landlords take advances willingly?—Oh yes.

Did they employ persons who really required relief?—Yes, and they spent about ₹50,000 from their own pockets. The people preferred to go to the zemindars because they were not under such strict supervision.

In another famine would you trust a good deal to zemindars?—If the District Officer knows how to manage them, I think it can be easily done.

You think it is an economical way of giving relief?—Yes, it saves you the establishment.

Will you get in the two-thirds?—I have stamped security. There is no fear, I think, on that score.

Who were the people who got gratuitous relief?—Simply the poor who had been cast off as soon as charity ceased.

How many?—131,883 units.

At no time over 4,000?—No.

Had you any special circle organization?—No, my gratuitous relief did not cost Government a single pie on account of establishment; there was no establishment, it was done through the zemindars. I formed committees which went round the villages in their jurisdiction from house to house; in each village a punchayat was appointed. To this punchayat the committee advanced money for 20 days' relief, and every 15 days the members of the committee went round and saw that things were going right.

Were people very anxious to be brought on to the list?—I think they tried to get on.

Mr. R. H. Renny.

28th Jan. 1898.

Mr. R. H. Kenny. On these local committees were there any officials?—The police officer was Secretary, and the remaining members were the head zemindars of the jurisdiction.

26th Jan. 1898. Do you think if you had a special organization you would have done better?—No, I have had no complaints whatever. I am sure if I had paid circle officers they would have only feathered their own nests.

Had you any poor-houses?—No, no kitchens or poor-houses.

(President.)—You say that you consider there has been a permanent rise in the price of food-grains; is there a very considerable rise?—Before the opening of the railway to Gya things were very much cheaper, owing to the difficulty of export. Since the railway was opened I think the price of food-grains has gone up.

The country does export in good years?—To some extent; to a very small extent. Only inter-district trade is carried on.

(Mr. Holderness.)—Is there any scheme for improving the railway communication?—The Government of India have sanctioned the railway from Baroon to Daltongunge, the lines are being located at present. The Engineers are on the work now.

Will that protect the district?—Undoubtedly, we shall never be in the same difficulties as now.

Is that sufficient?—There is a talk of extending the railway from Daltongunge to meet the Bengal-Nagpur Railway.

Is that required for protective purposes?—I think so long as you can get the food to Daltongunge, it is about all you require.

Have the people in the district got over the famine now?—Yes, they have had a very good *bhadosi* and a very good rice crop. The *rabi* has partially failed. There has been no rain since the 25th of October.

Are all cultivators and landlords much indebted in consequence of the scarcity?—Yes, I am afraid there is not much money in the country.

(President.)—You say that it is universally stated that during the late famine all classes had less power of resistance. This is stated by the natives I suppose?—Yes.

Is there any reason for that belief?—They have had two bad years in succession and high prices have prevailed. Their stock of grain has been depleted.

Do they say that the last famine was worse than the one of 1873-74?—Infinitely worse.

They don't give any other reason?—Yes, we could import little or nothing from the Native States.

They do not say that the people were poorer?—Yes, they do, for this reason that they had a bad year before.

(Mr. Holderness.)—If you had the famine again would you work it in the same way as the last?—I think so. I mean to say that it saved Government a lot of money. I do not think there were any deaths directly from starvation; but I would insist, and so would Mr. Forbes, the Commissioner, that Government should import food from the beginning.

When this railway is opened, will it be necessary to import?—No, and I would ask the Commission to note, if they agree, that the situation in 1897 was really serious, and to advise pushing on the contemplated railway as rapidly as possible. Had the *bhadosi* failed in 1897, there must have been very great mortality as we would not have been able to import food during the rainy season.

(Dr. Richardson.)—Is the population of Palamau increasing?—It increased 8 per cent between the last two censuses. I cannot say whether the food production is increasing proportionately. This increase of population no doubt increases our difficulties.

MR. E. T. SEALY, District Engineer, Champaran, called in and examined.

Mr. E. T. Sealy. I put in a written statement of evidence.

Paragraph 4 of the Indian Famine Commission letter No. 42, dated Calcutta, 12th January 1898.—

28th Jan. 1898. (a) In the month of March last it was decided to introduce piece-work in place of task-work on the Tribeni Canal and the extension of the Tirhoot State Railway in the district of Champaran.

(b) From personal observation, and judging by the opinion freely given by villagers, relief given under the piece-work system gave all that was required, and was much more popular than relief given under the task-work system. Secondly, with regard to economy, there can be no doubt that piece-work at rates sufficiently high to enable labourers to provide for their daily requirements and a little for a rainy day, is far more economical than task-work, which only allows the labourers to provide for their daily requirements, but which with the best supervision does not prevent a large percentage of the expenditure going into the pockets of the underlings, who will rob a dying man of the food Government is trying to keep him alive with.

Task-work may be done as cheaply as piece-work, if the working is carried out perfectly. So much is left in the hands of the Officer in Charge and those under him, with respect to the amounts to be paid for short work, that there is scope for cheating, which is usually done in the most impartial way, both from the Government and the relief coolies.

Piece-work rates can be so adjusted as to relieve all classes of labour. The economy of giving the weaker people a higher rate was distinctly proved by the fact that after a short time many of them had improved in condition and become strong enough to be drafted on to the ordinary rate work when they were able to provide for themselves.

(c) The first and most important measure necessary to enable relief works to be carried out

effectively and economically, is to have a programme of useful works, with full details ready, so that the staff necessary for supervision may be set to work the moment they arrive. The professional staff will then take the general direction. Non-commissioned officers and men from British regiments are by far the most satisfactory class to be employed in charge of work, and for measuring up and paying the labour.

(d) The first signs of famine are apparent in the condition of beggars. As soon as the population begin to feel the pinch of high prices and short stocks, they cease to be able to feed beggars. They are consequently the first to require the help of Government.

They should be provided for independently and specially. On no account should they be allowed at or near any relief work. Dependants cease to be in evidence as soon as piece-work takes the place of task-work, and, therefore, the lame, halt and blind are the only ones for whom provision is necessary. Should task-work or piece-work with a limited maximum wage be resorted to, minimum or penal wages should on no account be given. The result of paying the minimum or penal wage is that numbers of persons come to take a daily allowance for doing nothing, who are not actually in need of relief.

Should high caste or weakly persons be unable to earn sufficient at the ordinary rates, work at a higher rate should be given. The strictest supervision is necessary to prevent lazy able-bodied persons joining these gangs.

All labourers should be allowed to work in small gangs. Little or no extra labour is entailed in measuring up and paying small gangs. It ensures the people getting their dues. High caste people do not mind working for their food, so long as they are not brought into immediate contact with members of lower castes. Another reason why small gangs should be allowed, is that when large gangs work, the work practically becomes contract work. The head man who receives the amount earned, and distributes it, takes a percentage from each small gang.

The large gang always splits itself up into small family gangs, and divides the amount earned proportionately according to the amount of work each small gang has executed.

Muster rolls are not required in either piece or task-work. When muster rolls are kept the relief labourers think they must be paid daily wages. As soon as their attendance is taken, they think they are safe, and do very little work afterwards, unless the work is carried out under the task-work system known as the Blackwood system, which is piece-work with a limited maximum wage.

Paragraph 89, Chapter VI, of the Bengal Famine Code, which says that only able-bodied labourers should be employed by the Public Works Department, is wrong. It is preferable to have the whole of the members of families working together than to separate them.

Small silver coin is the most suitable and convenient method of paying labourers, and prevents cheating to a great extent.

(*President.*)—How long have you been in the Champaran District?—Since October 1876.

You know the whole district, I suppose, very thoroughly?—Yes.

(*Mr. Higham.*)—What works were under your charge?—I was in charge of all the works in the whole district from January until about the beginning of April when, under the Commissioner's instructions, the district was divided into two divisions.

And you began with piece-work?—No, we began with task-work much on the same lines as Mr. Blackwood's system, but we only paid for the actual amount of work done. Afterwards we went to task-work; in April piece-work was substituted for task-work on the Tribeni Canal and the extension of the Tihoote State Railway.

Is it your opinion that piece-work is the best form of work for famine relief in all cases?—My experience is that piece-work is preferable to task-work. The people themselves prefer piece-work to task-work. They are accustomed to piece-work and they understand it, and it is easy to manage.

Are the people willing to come long distances for piece-work?—Yes, they came eight or ten miles or even more for piece-work.

And do you think that piece-work can be adapted to the case of people of reduced physique?—Yes, I think so. We had three rates, namely, a lower, a medium, and a higher rate according to physique. Professional labourers were put on the lowest rate and weakly people on the highest rate.

And how about gangs?—We allowed them to form their own gangs. We had no muster roll; only the name of the head of the gang and the number of people under him.

Can you give any idea of the saving of establishment effected by doing away with the muster rolls?—It effects a very considerable saving. It does away with the expense of *mohurrirs*. It gets rid of four out of every five *mohurrirs*.

Did you experience any difficulty in the fact of there being an excess of women or children?—No, none at all. The women and children can form gangs among themselves and work at the ordinary rates. My experience is that women and children can earn an adequate subsistence on piece-work. And it is not necessary to have dependants.

I suppose when you have women diggers like that they go into the lowest class?—Not necessarily, but they might.

On piece-work do you allow the workers to come and go at what hours they like?—Certainly. As a matter of fact they came very early in the morning and worked continuously till the hottest part of the day, when they rest, coming to work again in the cool.

And what about Sundays?—They take their own day of rest.

What sort of men did you have as Officers in Charge of works?—I had some Bengalis and other men who were sent up from Calcutta. And besides these I had some non-commissioned officers from the Devonshire Regiment, the Hampshire and Bedfordshire regiments also.

How did these non-commissioned officers do?—I think they did very well. They were better than the ordi-

nary men I got. They all knew the language fairly well, having had to pass some sort of an examination. They knew the language quite well enough to enquire into any complaints made to them.

Do you think it necessary to limit the amount a man may earn on piece-work?—No, I do not, more especially if there are three rates as I suggest. I think a man coming on to the works should be allowed to earn more than he requires for his own daily consumption.

Did you find that the people on piece-work worked continuously or only spasmodically?—They worked steadily throughout until the rains fell and not spasmodically. As soon as rain fell they left the work to go to their fields. I do not think they worked hard simply with a view to accumulating money.

What was the size of your working parties?—The average working party was from five to twenty.

Did you have any complaints from the members of the working parties that the wage was not fairly distributed by the head?—At first, when the gangs were very large, averaging from sixty to a hundred, some complaints of unfair distribution were made, but afterwards when the people were allowed to make their own gangs there were no complaints. There were never any complaints from the small gangs.

(*President.*)—When you had big gangs at first, did the people make up their own gangs?—No.

(*Mr. Higham.*)—At what intervals did you make payments?—As a rule once a day.

(*Mr. Bourdillon.*)—And you were able to do that because the measurement is so simple?—Yes.

(*President.*)—The people on relief works were all paid in money?—Yes, always.

Had you to make any arrangements for the banias to supply grain at the relief works?—No special arrangement was required. The banias came voluntarily and set up a bazar at each work. There was a good deal of competition among those banias on the works, and they were all supposed to sell at ordinary bazar rates. Every now and again the workers would complain that the banias were not selling at the proper rates. And these complaints were always enquired into. On one occasion I detected a bania selling at a price a *seer* too dear. I threatened to turn him off the work and that was sufficient to keep him in order.

(*Mr. Higham.*)—Did workers on the Tribeni Canal and other large works sleep in huts on the works?—Yes.

How long did these works last?—The Tribeni Canal lasted from the beginning of April till October; the railway not quite so long.

If any broke down in health, were there any arrangements for sending them off to hospital?—Yes, they were sent to the hospitals at Ramnagar and Sadowa. There was a hospital assistant in charge of these hospitals who looked after them.

When did the people leave the relief works of their own accord?—They all left after the heavy rain we had after the 4th or 5th October.

I suppose the amount earned per unit in the different gangs varied very considerably?—Yes, it certainly did vary. The average earned per male unit was 2 annas 6 pie. I think the people did very well on the wage they earned.

(*President.*)—What was the average price of rice?—About 8 *seers*, but it went down as low as 6 *seers* once.

(*Mr. Holderness.*)—Did you finish the Tribeni Canal?—No, we only did one-third of it.

Could you have finished it if you had commenced it earlier?—I think so, if we had started it in November. That would have given us five or six more months to work on it.

You could not begin in November because you had to get the project prepared?—Quite so. The work had to be surveyed and laid out.

It would have been better if the work had been prepared beforehand?—Most certainly.

Why was it not on the district relief programme?—It was on the district programme, but it had not been worked up.

Mr. E. T. Sealy.
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Mr. E. T. Sealy.
28th Jan. 1898.

Were the majority of the workers on the canal professional labourers or ordinary agricultural labourers?—The great majority were ordinary agricultural labourers. There are very few professional labourers in this part of Champaran. Even in ordinary years we have to import earth-work labourers to this part of the district. Very few labourers came to the canal from distant parts.

In another famine you would prefer to have all the works on the piece-work system and under the Public Works Department?—Yes.

And do you think you could expect people to come ordinarily 10 or 15 miles for work?—Yes, if you gave them huts on the work. But when the rains commence it would be necessary to have works near their villages.

In that case would you expect a corresponding increase in gratuitous relief?—No, I don't think so. The piece-workers can earn enough to support their dependants. And for others there is the poor-house and kitchens.

You think that the piece-work system tends to prevent people, not requiring relief, from flocking on to the works?—Yes, I think piece-work is a better test than task-work. The great drawback of the task-work system is the minimum wage and the difficulty of supervising. The difference between the minimum and maximum wage is not enough.

Do you think your measurements were on the whole accurate?—I cannot say they were.

[This question related to task-work only; piece-work measurements came out $\frac{1}{2}$ per cent. only in excess of check measurements.]

In the Champaran District would it be possible to provide, for future famines, a scheme of large and useful relief works?—Yes, and I think such a programme should be prepared. Our programme certainly was defective. I think big works should be commenced as soon as possible in a famine. Among big works there is the Tribeni Canal and the Dakka Canal, also some roads, and there are some hill streams which might be utilised for irrigation purposes.

(Mr. Boss.)—If you begin with task-work and go on to piece-work would you find any difficulty in inducing people to go on to piece-work?—I scarcely think so.

How would you deal with able-bodied beggars?—If able to work they should be made to work.

(President.)—Did you receive any complaints from private employers of labour that they were unable to get labourers, because of the attractiveness of the relief works?—I received no such complaints. Indigo planters at first gave their people what work they had for them. When that work was over, and there was no more for them, the planters were very glad that their people could get employment on relief works.

MR. CHARLES STILL, Indigo Planter, Behar, called in and examined.

I put in a written statement of evidence.

Mr. C. Still.
28th Jan. 1898.

(a) The only departure from the prescriptions of the Bengal Famine Code which occurred in the part of the country under my charge, were changes made in the manner of setting the amount of task-work to be performed. At first the task was set on each individual of the gang, the total being the amount to be performed. This method was soon changed to the digger system as an easier and simpler way of working, and lastly the piece system was introduced on works under the Public Works Department.

(b) So far as the relief of distress and the saving of life went, I think the measures adopted a perfect success. So far as economy goes, I think that under the system on which we worked more economy could not have been effected.

(c) From experience gained during the past famine, I would strongly advise piece-work being adopted in future as the only really practical and economical way of doing earth-work.

(d) Allowing the object of Government to be:—

- 1st—to save life;
- 2nd—to avoid giving relief where not necessary;
- 3rd—to obtain a fair value for money expended;
- 4th—economy generally.

I do not think it possible in practice to attain the above result working under Famine Code rules as they exist.

The rules of the Famine Code are framed with the object of not allowing any one person to earn or obtain more than is necessary to keep him or her alive. This principle seems to me to have been the weak point, and the cause of many difficulties; so long as minimum or penal wages were paid, objects 2, 3 and 4 were lost, because the Behar raiyat would always accept these wages and do nothing rather than work. This having been proved, and in order to enforce the task, we were instructed to turn people away from the works who showed no intention of performing a task; but this system, although no doubt it reduced the numbers on works, still it also no doubt in many cases drove the more weakly on to gratuitous relief.

From my long experience of the Champaran raiyat I have learnt that, with the exception of professional earth-workers, no raiyat will ever work on earth-work unless driven to do so by hunger. That he will always accept a wage (if available) for doing nothing, rather than work for a higher wage. For this reason piece-work is the most practical and efficient way of working. Piece-work

will not attract the ordinary labourer or raiyat.

Piece-work at fair rates fixed under 3 heads:—for professionals, ordinary, and weakly, would only take people to the works who should be really in want. Piece-work at fair rates will enable people to earn more than enough for their daily bread, and this seems to me a necessity and not an evil; a thing to be sought for, and not avoided. If people are allowed to earn more than sufficient for their own daily bread they should keep their own dependants and would do so. Gratuitous doles would be unnecessary. People would be enabled to leave the works occasionally to cultivate their lands—would be enabled to leave their old and young in charge of their homesteads, cattle, etc., would earn enough to purchase seed, etc., and avoid the necessity of loans for the purpose. In fact, piece-work, well organised, as it was on the Tribeni Canal, would, in my opinion, cover the four objects of Government—

1st.—It would save life more effectually.

2nd.—It would not attract labour but would relieve where relief was necessary.

3rd.—A fair and known value would be obtained from money expended.

4th.—Would be more economical.

Further, all control and organization would be much simplified and Famine staff much reduced.

In North Bettiah we have three important crops only: *Bhadai Dhan* (paddy), *Aghani Dhan* and *Babi*. A partial failure of *Bhadai* and a complete failure or almost complete failure of the other two may, without much further enquiry, be put down as meaning famine—more or less intense according to the outturn of the years previous, or which depends (what I understand to mean) the resisting power of the natives. Resisting power practically means either grain, cash or jewels in hand. I would recommend that to meet future famines, projects should all be ready and complete beforehand. Maps of a good serviceable scale should be in stock showing—Thana boundaries, villages with boundaries, rivers, roads, tanks (population and area of each village shown on the map). Famine organization must of course rest with the Collector, but I think that all earth-works should be under the control of, or at any rate superintended by, the Public Works Department.

Except in large centres, I would not advise poor-houses— but should treat kitchens as small poor-houses and would establish as many as required by treating kitchens as poor-houses.

I mean that I should never allow people to wander; they should be kept confined; on no account would I issue cooked food except to inmates; I would like to see a liberal allowance made with the view to putting people in a condition to be drafted on to works. The short allowance principle again in this seems to me to be a false economy as we

only keep the people with us. Allowing the introduction of piece-work to do away with gratuitous doles, the circle officer would have ample time for careful inspection of each village, he would be able to draft people either to works or kitchens, and would be enabled to personally ascertain whether (as may sometimes but rarely occur in North Bettiah) any people of high caste should be relieved in their homes. I can vouch for the excellent services rendered by non-commissioned officers and privates of European regiments, and if they are available in future famines the greater difficulties will be obviated. One of the greatest difficulties during the past famine was the question of staff; no doubt many valuable suggestions might be now made which would prove of great service in case of future famine.

(President).—You had charge of the northern end of the Champaran district?—Yes; my indigo lands are in that part of the district.

So you know it very well?—Oh, very well indeed.

It is a great rice country?—All rice. The very general failure of the rice caused the famine.

Is it a custom of the Assamis then to store a certain amount of their harvest?—Every man stores as much as he possibly can for his own consumption.

Up to the next harvest?—Yes.

Who were the people who came upon the relief works?—Small cultivators mostly.

Was there an absolute dearth of grain in the country or was it that the people held up?—I do not think that any body held up. It was a real scarcity of grain.

Prices went up suddenly?—Very suddenly.

In September, October, and November?—Yes.

They rose till the next *rabi*?—They kept rising till the end of the next rains.

Were the local grain dealers active in bringing in grain?—Yes, they did all they could to import. The greater part of the grain was brought in by ponies and bullocks. I do not think a very large quantity was imported from Nepal.

(Mr. Holderness).—Is Ramnagar the head-quarters of the tract that you were in charge of?—Yes; Ramnagar is 28 miles from the railway.

What relief works were carried out in your charge?—Several tanks, two irrigation *pains* and two roads.

There was always a work pretty near to a village?—Yes, reasonably near to every village.

People generally went home at night from the relief work?—Yes. They all went home.

What do you mean by the digger system?—The task was set on the diggers, instead of being set on each individual.

What was the difference in number between women and men?—Men about 40 and women about 60.

You say in your written evidence, "I think that under this system on which we worked, more economy could not have been effected"; what does that mean?—I think we could have done it much cheaper. The staff was not good.

(Mr. Bourdillon).—With you they all worked on the task system?—All on task system.

(Mr. Holderness).—In your charge how many persons had you on gratuitous relief?—About 7,000 as a maximum.

If you had had piece-work you could have got rid of about 6,000 of these?—Yes, I could have got rid of about 6,000. I greatly prefer piece-work.

Could not those people have been employed under the task system?—Well, you could employ them under the task system, but it would not have been so effective.

They were not employed?—They would not come.

You actually turned them off?—We were told to turn them off. In the dry season I think people would as soon live on the work as on gratuitous relief. The difference between the maximum and the minimum wage is too little. The Behar raiyat if he can get a minimum or a penal wage or gratuitous relief will take it rather than work to get a full wage. Piece-work is the thing to make the Behar raiyat work as it leaves him no alternative. And with piece-work you can greatly reduce gratuitous relief.

(President).—You turned away a man, if he did very little work?—Yes; if he looked sickly and unable to do a full task, he went to gratuitous relief.

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Still.

(Mr. Holderness).—I suppose the difference between the full and minimum wage is not very great?—No, it is far too little.

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(President).—What was the maximum rate of the task work?—2 annas.

At the end of the famine did you start kitchens?—I started kitchens from the beginning for wanderers, beggars and very weakly persons.

They got food and had to live there?—They had to live there. I treated them all as poor-houses.

When a man came when would you let him go?—There was no restraint; a man could go when he liked.

If he left he would not be taken on again?—No.

They would get gratuitous relief elsewhere?—Yes.

But not those who were able-bodied?—It is a very difficult question to settle that. It is hard to decide whether a man is able or unable to work.

(Dr. Richardson).—You did not come across any death from starvation from beginning to end?—From beginning to end I saw no death from starvation.

(Mr. Holderness).—Do you think Government ought to have interfered in the grain trade?—No, most decidedly not.

If Government had imported any food, would that have had any effect?—That would have done a great deal of harm. It would have stopped private trade. As a matter of fact, the importation of rice from Burma was retarded until it was known whether or not Government would import.

Do you find it very difficult to judge whether or not a person ought to have gratuitous relief?—Well, it is difficult; unless you are a medical man you cannot tell. It would require very close inspection to find that out.

(President).—Why do you say "I would on no account issue cooked food except to inmates"?—I think that any form of gratuitous relief demoralises and that the most demoralising form is cooked food. If people were to get relief in the shape of cooked food, I think that in time their natural reluctance to accept such charity would wear off. I would only give cooked food in poor-houses.

(Mr. Holderness).—I understand you were in charge of works that were carried out by civil agency?—Yes.

And these works were all on the task system?—Yes.

You did not personally conduct any piece-work operations?—No.

Why then do you recommend piece-work?—In the first place task-work is very difficult to organise, and we have not the staff to do it. I am acquainted with piece-work. I saw it being conducted on the Tribeni canal, and besides, it is a system which I, as a planter, ordinarily work on. Both I and the people are thoroughly familiar with the piece-work system.

Do people go to task-work who would not go to piece-work?—Yes, so long as minimum wages were paid.

Did you have to give gratuitous relief to people who might have worked, but would not go to the piece-work?—Yes, until the weakly gang was started.

Supplementary Note.

In my written evidence I have said that the turning off of people, who showed no intention of performing a task, no doubt reduced numbers on relief works but drove the more weakly on to gratuitous relief. I would wish my meaning to be clearly understood on this point.

It must be remembered that no gangs were ever formed that could not (if they worked properly) have performed a task.

The Behar raiyat will soon discover for himself what pays him best, and if lazily inclined will at once find out how he can obtain the greatest sum for the least possible amount of work.

So long as a minimum or a penal wage was paid, naturally the more old and young they could bring on to relief works the better for them; but as soon as task was insisted on, and they were told to do so or go home, then it paid them better to bring their strongest and allow their

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weakly to go on to gratuitous relief. All families would be anxious, if possible, to leave one or more members of their families at home to look after things, and would, as a rule, prefer to leave an able-bodied one if possible, to look after lands, cattle, etc., etc.

As an example I would ask to be allowed to give the following:—

During the time minimum or penal wage was paid, allow two cousins to have a family of one old woman, one young woman and two children each.

One man, two old women, one young woman, and four children would come on to relief works. Total eight people.

One man and one young woman would remain at home. Of these eight people perhaps one old woman and two children would be put on as dependants at relief works. The remainder, one man, one young woman, one old woman and two children, would form a gang, not per-

haps a very strong gang; the man and young woman would have to work properly to perform the task. Allow they declined to work hard and did not do the task and were told they must go. They no longer got the whole family enough food to exist on, so the next day the two men, two young women and two children would turn up; this gang would probably perform the task and the two old women and two young children would go to gratuitous relief, and get weekly doles, thereby reducing the relief numbers by two and increasing gratuitous relief by four. Now this does not imply that the four who went to gratuitous were not fit people for the same; they were two weakly women and two small children professing to have no relatives, and would and could not have been refused gratuitous relief.

With piece-work under the three heads and at fair rates all these difficulties would be avoided.

At the Additional Commissioner's Office, Bankipur.

SIXTH DAY.

Saturday, 29th January 1898.

PRESENT:

SIR J. B. LYALL, G.C.I.E., K.C.S.I. (PRESIDENT).

SURGEON-COLONEL J. RICHARDSON.

MR. T. W. HOLDBERNESS, C.S.I.

„ T. HIGHAM, C.I.E.

RAI BAHADUR B. K. BOSE, C.I.E.

MR. J. A. BOURDILLON, C.S.I., (*Temporary Member for Bengal.*)

MR. H. J. McINTOSH, *Secretary.*

MR. J. R. BLACKWOOD, Officiating Joint Magistrate, Darbhanga, called in and examined.

Mr. J. R. Blackwood.
29th Jan. 1898.

I put in a written statement of evidence.

I have been asked to draw up in writing a note of the evidence I think I can usefully give on:—

- (a) Departures from the prescriptions of the Bengal Famine Code which have occurred in this province during the recent famine.
- (b) Degree of success which has attended the measures adopted, primarily with regard to relief of distress and the saving of human life, and secondarily with regard to economy.
- (c) Advice as to measures and methods of working likely to prove most effective in future in those two respects.
- (d) Other recommendations or opinions thought likely to be useful in future famine.

I cannot do better than refer the Commission to the very able "Final report" of Mr. Carlyle on the famine, pages 25 *et seq.* He there discusses the advantages of "piece-work with a maximum." These remarks are partly the result of discussions with me and partly also of Mr. Carlyle's own observation. I feel that I cannot improve on Mr. Carlyle's account of the matter, which is the result of much labour and thought; but it may perhaps interest the Commission to know how and from what difficulties the system first arose and was afterwards developed.

I was placed on famine duty as a Charge Superintendent in December 1896. Relief works were opened about the close of the month. The first work opened was the Darbhanga to Kamtoul Road. In three or four days the number rushed up to over 6,000; indeed I do not think they were ever counted. The work done was never measured nor was a proper *hazri* ever taken. At that time we did not know the exact extent and acuteness of the famine; and Mr. Carlyle's great idea then and always was, to relieve at all hazards people who came to try and find work. Mr. Carlyle and I personally had, in consequence, to pay mates 2 rupees each with our own hands without keeping any accounts and had to continue doing this till after dark. The causes of such a state of affairs are not far to seek; it was opened before a proper system of task-work had been settled: and according to section 71, Famine Code, "in no case shall the wage paid be less than the amount of money required to buy at current rates the penal ration." In other words, each coolie must receive three pice whatever he does. As soon as the coolies got to know this, I found that I could get hardly any gang

to earn the full wage. When Mr. Bourdillon and Mr. Glass came up to inspect us in February we were being constantly met with a cry from the coolies, "We are starving on three pice." When the Lieutenant-Governor came up at the beginning of March, that was the real problem troubling his mind, *viz.*, how to get the coolies to accept the conditions for full wages; I tried hard for a long time by persuasion, threats and punishments, to get the full task done: but I finally gave the thing up as a bad job.

The effect of this state of matters on the coolies, I found, was to utterly demoralize them. They did not improve on the works. Their physique and morale both deteriorated and they were becoming more or less unmanageable.

The effect on the subordinate staff was no less serious. The amount of work done was different for each digger, varying from a *kodalie* full of earth to the full task. It was quite impossible for me to measure even one work, in a whole day. Supposing I did so, I had no other satisfaction than to know that Government was being swindled and that if I dismissed the staff, I would have more trouble in finding new staff than in going on with the old. Coolies would work for a whole week or more in the same pit, and it was quite impossible to know what they did in any one day.

I was therefore compelled to set to work to see how this state of matters could be remedied. It occurred to me that if I told the coolies "Here is your 200 cubic feet; you won't get a single pice till you finish your task. If you die, it is your own fault." The coolies immediately agreed to this and work went on well in proportion to the completeness with which the system was adopted. The only difficulty I had was with the subordinate staff, who in all cases I find object to arrangements which diminish their chances of illicit gain. The result of this was, that while on the Dhol tank on the 1st February, only 5 per cent. did the full task (that 5 per cent. being professional *muttie* diggers), by the 1st of March, 95 per cent. were doing the full task and hardly a single pit was to be seen that was not two feet deep.

But the greatest advantage of all was the relief it gave to the strain of work. No measurement was required at all to check work. One glance over a tank or a road by which the pits excavated from the day of last inspection were counted, and a comparison of that with actual expenditure gave a very good indication whether any swindling was going on or not.

Had this system been in force at the beginning of the famine, I am of opinion that the rush on the works would

have been checked and the great amount of swindling that took place effectually prevented. This could be effected of course quite as well by piece-work. Private agency always adopted piece-work as being the simplest and most economical system. The objections to piece-work from the famine point of view, in which the primary consideration is relief of distress, have been discussed by Mr. Carlyle in his final report and I cannot improve on it. I believe that the piece-work with a maximum system satisfies the primary requirement of relieving distress. The weak are not ousted by the strong. The strong do not gain more than the weak. At the same time it has all the advantages of piece-work from the point of view of economy; above all it has stood the test of experience and does away with that system of fines which is the chief difficulty of the Famine Code, and which puts a power into the hands of the subordinate staff which they should never have and cannot use satisfactorily.

II. I should like to make a few remarks in connection with Form 18 of the Famine Code. It is to be observed that this is a form for measurement of earth-work: but it makes the unit the gang which is an aggregate of individuals. Very early in the famine, I found that this was a fruitful source of difficulty; I therefore insisted that the pit and not the gang should be made the unit for the measurement book. The gang is variable and as a matter of fact does vary daily both in numbers and in individual members: the pit, however, is a constant in the system of "piece-work with a maximum" and can be seen many days after it has been dug.

III. The most objectionable book one had to deal with in famine work was the muster roll. It would be a great point gained if it could be altogether abolished (i. e., Form 16 of the Famine Code) and an altogether new muster roll introduced which would not be separate from the measurement book. The names of each individual digger should be entered and in another column the number of carriers allowed to him without their names. In another column the number of days taken to do the task should be entered. This would effectively prevent a new form of swindling which was developed when the swindling in diggers had been effectually checked, viz., fictitious increase in the number of carriers. I would suggest that the measurement book should be something like the following.

MEASUREMENT BOOK AND MUSTER ROLL.

Name of relief work.

Amin in charge.

Serial number of digger and pit.	Name of digger.	Number of carriers working with digger (names not given).				Number of days taken to do the task.	Amount paid.
		Men.	Women.	Big children.	Small children.		

The great advantage of this is that the biggest *bud-mashes* who work in famine would be effectually abolished, namely, *hazri navises*. It will be noticed that all these recommendations are in the line of working and checking by measurement only. I am of opinion that it would be much better if, at least on small works, mates were altogether abolished and payments brought down to the individual digger. There is a little clerical difficulty in large works, but this is not difficult to get over. If the names of carriers were not written the clerical staff would be so reduced that a great economy would be effected when the gangs become large. I have always found that the coolies are swindled by the mate, more especially if the mate is not of the same village. If the gang varies, that will not alter this muster roll. The name of each digger is daily entered and he is paid nothing until he completes his task. I found that the carriers of a *kodalie wallah* were always his relations. It is unnecessary and a source of swindling to enter their names; at the foot of each page there should be a line "number of pits excavated for the day."

Form 18 of the Famine Code, compelling as it does the amin or mohurrir to write down daily the amount that "should have been done" and the "amount in reality done," is extremely difficult to work. As far as my own experience goes, it is impossible. The prime necessity in famine work is simplicity. The subordinate staff are generally incompetent and corrupt: the coolie is suspicious of everything he does not understand; even the Charge Superintendent is a person who knows nothing about his work till he learns it by bitter experience.

It is a matter of prime importance that all arrangements of a character the least complicated should be as far as possible avoided.

The system of laying out task-work, which was kindly shown to me early in the famine by Mr. Mills, proved so effective that I think it deserves to be described in the new Famine Code. It has been discussed by Mr. Carlyle in his final report.

(President).—Who are these mates, Mr. Blackwood, that you mention in your written evidence?—Mates of gangs. The headmen of gangs.

How long have you been in the Indian Civil Service?—Two years.

Three pice is the penal wage?—The penal wage is three pice.

Can you explain how you gave up the task system and adopted another? You told the coolies "Here is your 200 cubic feet. You won't get a single pice until you finish your task." The coolies agreed to this. What was the inducement?—The inducement was that they would not get anything at all till they did the task that was set.

Not that they liked it?—They did not like it. They were compelled to do the full task.

What swindling do you allude to?—The swindling was on the part of the subordinate staff. The gang mohurrirs and overseers.

How did they swindle?—There were many forms. The chief form was the artificial increase in the gang, and if I tried to check the number of the gang, the mate would simply bring coolies from another gang. The whole number of coolies on the work was nearly always less than the number returned. Another form of swindling was the entry of a gang as present for several days when it had only been present one day. I detected one case in which the money of eight gangs was appropriated in three days.

When was the work measured up and how often?—It was measured up by the Officer in Charge daily and by the Charge Superintendent whenever he was able to go and inspect.

When was payment made?—Daily: every evening.

Is that for the day's work?—Yes, for one day's work.

Suppose a pit is incomplete they are paid accordingly?—They are not paid until the pit is complete. They must complete the pit before they are paid.

How does the maximum come in?—In true piece-work there is no maximum of work or wages, that is to say, the worker is only limited by his ability and strength to work; but under my system the amount he can earn is limited to a maximum that is fixed.

If a man finishes before the day is over?—Then he can go away.

Can you work the same system with roads equally well?—With roads of course it is more difficult as objections are made about digging the land.

(Mr. Holderness).—Did you ever find that a man used to go round the country recruiting gangs?—I never saw anything in the nature of a professional contractor. I found that mates always endeavoured to split up the gangs in order to increase the number of mates. By appointing relatives they were thus able to increase their own gains.

Would you do away with the minimum and penal wage, and pay by results subject to a maximum?—Yes. The penal wage is the most objectionable thing in the Famine Code. The whole of the relief workers in the district appeared at one time to be desirous of being put on the penal wage.

(Mr. Bourdillon).—They were willing to take the penal and do nothing?—Yes.

(Mr. Holderness).—You could not rely on the measurement returns?—There were no measurement returns practically at first.

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Afterwards when you introduced your system could you rely on any measurements?—Yes, to a very great extent.

And the daily outturn of work by units; can you believe that was trustworthy?—Yes, on the whole. I gave more attention to some works than others.

How many works had you in your sub-division?—At one time they exceeded fifty.

You were not in charge of a sub-division?—I was in charge of a thana.

Well, in your thana how many were there at a time?—I think about fifty.

Were those works small?—Some were small and some were not. We had one of 3,000. They varied from 500 to 3,000 labourers; we had a number of them—1,000.

I suppose people did not live on the works?—No, we had no case of people living on the works.

Would it have been better to have had larger works?—It would have been better from the point of view of making my work easier.

But otherwise?—It would not have been better for the people. So far as I can see, the utility of large works arises from the greater perfection of their organization. In most cases people don't want them.

Was the distance task disliked by them more than almost anything?—They would almost die rather than go 10 miles for work.

(*President*).—What was their objection to leaving the villages?—In every country labour is more or less immobile. In India it is more immobile than in any other country.

(*Mr. Holderness*).—Had you many persons on gratuitous relief?—Yes.

In your thana, for instance, how many had you?—I do not know the exact figures.

What thana was it?—Suddar thana.

Do you know what percentage of the population you had on gratuitous relief approximately?—I am afraid I cannot give any figures.

(*President*).—The reason for entering the number of carriers in the returns is, I think, statistical?—Yes. It is otherwise unnecessary to consider them.

If you only pay by piece, it does not affect payment, does it?—No. If you give the amount of money to the digger that would be paid to the proper number of carriers it would not matter. The carriers would be paid by him.

(*Mr. Holderness*).—To what class did all these people on gratuitous relief belong?—Both middle and lower classes.

Did they want to come?—Oh, yes. There was no reluctance whatever to come on gratuitous relief. It was eagerly sought.

Was there any disgrace attached to the acceptance of gratuitous relief?—The high castes thought it a disgrace to work, but not to come on gratuitous relief.

What was the death-rate?—The death-rate was under the average.

(*President*).—To what class did the relief workers mainly belong?—The higher castes thought it a disgrace to come on to the works, and it was only when they were pretty nearly dying that they came on to the works. For instance Brahmins, Rajputs, Kyastas.

(*Mr. Holderness*).—Then most of the people who were put on gratuitous relief depended on private or village charity?—Yes. I should find the majority in ordinary years depended on charity.

A large number were children?—Yes, a large number of children also.

Were they children of widows?—Yes, they were chiefly orphans.

Fatherless orphans?—Yes. And widows of course made up a large proportion of the women on gratuitous relief.

If you had not started gratuitous relief, would these people have continued to be supported in the villages?—Well, it is difficult to say what would have happened; to begin with, those who gave relief in ordinary years are not able to give it in times of famine. Many would probably have died.

(*Mr. Holderness*).—Can you suggest any plan of curtailing this gratuitous relief in a future famine?—In the case of cripples and people with paralysis in the legs it is impossible to do anything except to give gratuitous relief.

But there are others?—Those persons who are able to work were as far as possible forced to work.

Could anything more have been done in the way of getting work out of these people?—I should think it could, if it had been better organised. There was a large number who were receiving gratuitous relief, who were of the same class as those who were working on the "D" class.

So it was difficult to discriminate?—Yes, it was.

Do you think that gratuitous relief is demoralizing?—Yes, I should think so, except in the case of those who would habitually depend on private charity.

Did they find it hard when they were turned off at the end of the famine?—I should think they did.

Was any order or instruction given in the villages to the effect that the villages must support their poor?—No order that I know of was given. The recipients were simply given a full dietary dole and were told to make the best of it.

Towards the end of the famine did you substitute kitchens at all for gratuitous relief?—Yes. We opened kitchens to reduce gratuitous relief. But I left my charge just as that step was being taken. I believe the result was that high caste people would not come to kitchens.

(*Mr. Bourdillon*).—You got the orders about that?—Yes, I got the orders about that.

(*President*).—In what number of places were kitchens opened?—One was opened in each circle.

Who were the cooks?—A Brahmin cook was appointed for each kitchen.

(*Mr. Bourdillon*).—When kitchens were opened, the order was that all other gratuitous relief would be stopped?—Yes.

When was that stopped?—About the middle of August, which is about the time when I left.

(*Dr. Richardson*).—Do the higher castes object to their children being fed from the kitchens?—Yes, they object. After 5 or 7 years of age they object universally.

(*Mr. Higham*).—Did the other castes have the same feeling?—The Rajputs have to a certain extent. The lower castes go quite readily to kitchens and Mahomedans do not object.

(*President*).—What class of men attended the relief works? Were there many cultivators?—The population in Durbangha is pretty dense and therefore the majority of the workers were the labouring classes. A large number of these labourers had small jotes. We had none with large jotes.

I see the local paper here says nearly 90 per cent. were Noonias or Jolahas?—That is all incorrect. The great majority were agricultural labourers, described in the Famine Code as B.

Professional diggers I suppose were very few?—I cannot give the exact percentage. No exact enquiry was made.

I suppose these Noonias were all professional diggers?—Whenever we had to dig wells we employed the Noonias.

In your thana was there any poor-house?—There was one poor-house. It was under the Civil Surgeon.

(*Dr. Richardson*).—Was there a resident medical officer in charge?—Yes, a doctor Babu was in charge and the Civil Surgeon also continuously inspected.

It was at the head-quarters?—Yes.

Were the Maharaja of Durbangha's estates under separate charge, or were his estates and other estates all mixed up together?—In some cases they were mixed up together and in some cases they were separate. As a rule instructions were given to circle officers not to give relief to the Maharaja's raiyats as he was looking after his own raiyats.

The Maharaja looked after his own raiyats on the same system as Government looked after the raiyats in the other estates?—Not exactly on the same system; the Raj Manager will be able to answer the question.

(*President*).—Were you concerned in making loans to cultivators?—I gave some small advances to people who had proved their distress by long attendance on the works.

For seed?—Yes, for seed.

(*Mr. Holderness*).—Were those loans?—No; gifts.

(*Mr. Bourdillon*).—From the Charitable Fund?—Yes, from the Charitable Fund. I had nothing to do with giving loans from Government money.

Was there any case of death from starvation?—There were some in the poor-houses, but I did not see any elsewhere.

(*Dr. Richardson*).—Were the medical arrangements sufficient?—Yes, the Civil Surgeon was in charge.

(*Mr. Bose*).—Would you have special gangs on higher rate for weakly people?—As far as possible I put all weakly people on to D class of work. They gave a tremendous lot of trouble.

You would not have any special gang?—No, I should try to make some other arrangement, if possible.

You would not have any special higher rate for weakly persons?—No.

(*Mr. Higham*).—Under your system you put a certain party into a pit and you told them to dig down to a certain depth, and they were to be paid a certain amount when they had dug down to the depth?—Yes.

They were paid when they had done their depth?—Yes.

How was the amount to be paid fixed?—It was fixed by the wage of the digger and the sum total of wages of the carriers allowed.

That is, you estimated the theoretical number of carriers you required?—Yes.

The amount paid had no reference to the number of carriers that were actually employed?—No. The amount paid was the wage of the digger, plus the wages of the theoretical number of carriers required.

What is the advantage of waiting till the task was finished? Does not your system practically amount to a contract with the digger?—The advantages are:—I. Simplicity. Uniformity in size of pits is secured; under the penal wage pits are all sizes. II. It is a real test of distress, which the penal wage is not. III. Measurements can be easily checked. Check is impossible under the penal wage. IV. The objectionable system of fines is abolished. V. The coolies readily understand it. They cannot be made to understand the Famine Code.

(*Mr. Higham*).—Were payments always made as you describe without reference to the muster roll?—Not always. Some task payments were made according to the actual muster roll and not according to the theoretical strength of the gang. But where the system was properly carried out payments were made on this system.

Do you think your system is better than pure piece-work?—Yes, I think it is. I think it is a better test of distress.

(*Mr. Bose*).—Does your system make any provision for dependants?—No. My system contemplates that dependants should either go on gratuitous relief or should be employed on D class task-work.

Does it involve a Sunday wage?—It also involves a Sunday wage.

If the theoretical did not correspond to the actual number of carriers, what happened?—If the theoretical size of the gang is incorrectly estimated, that is, if there are too many or too few carriers, then there must be some improper gain or loss of money to the digger and his complement of carriers. As the number of carriers is fixed by measurement correctly on a definite system, I do not see however that this is a real difficulty.

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MR. C. R. H. WEBB, Manager, Muktapur Indigo Concern, called in and examined.

I put in a written statement of evidence.

1. The famine circle under my charge may be described as about one hundred square miles from Malinagore and Kalangar ghat on the west, adjoining the Mozaffarpur Division to Ratwara and Nagurbusti on the east.

2. The labouring classes, who do not cultivate on their own account but trust to receive a share of crops as payment for cuttings, were the first to show signs of distress from the failure of the rice crops, and found employment on relief works in good time before they had reached such a stage of emaciation as to be incapable of useful work. The Mallas, weavers (Jolas and Momins), Goalas, Kayastas and a few Rajputs later on felt the pinch severe enough to send them on to the task-works instituted for general relief. There then occurred the result that the labouring class who are more or less accustomed to earth-work were paid at the same rates as these other who, although they might be quite as willing, were unable to complete their tasks in the same time. The number of women was out of all proportion to the men who came on the works, and the men were disinclined to be hampered by working with them.

3. I think that where possible a separation of castes on the works with different rates of payments would have been more applicable, to those totally unused to earth-work.

4. I find gratuitous relief is most demoralizing, and as long as there is a chance of receiving it the people of higher castes abstain from coming on relief-works and do their best to prevent any of their caste people from doing so. At a later stage when relief had to be given to those cultivators who had used up their seed-grain for food, the pecuniary relief came in as a real preservation against a continuance of distress, by enabling the lands to be fully sown as they were and a bumper crop realized as the result.

5. In other respects I am strongly of opinion that gratuitous relief is a mistake, excepting that poor-houses alone should be kept open for its distribution to adults and kitchens for the children, which latter proved the most beneficial means of using the charitable relief funds, and I would strongly advocate kitchens for adults unable to work, instead of the weekly grain distributions which resulted in the intended recipients getting perhaps half the amount intended for their maintenance, and consuming it in half the time as allotted by the rations, so that they starved for some days and did not benefit as much as they should have or recover sufficient stamina to take them off the list of gratuitous relief.

6. It would be absolutely necessary to have experienced Europeans to supervise all kitchens and poor-houses.

7. The system of payments in "Tokens" adopted in 1874 was good, and if it had been adhered to in the past famine would have stopped much rascality and proved a saving in expenditure.

8. A staff of natives accustomed to discipline is an absolute necessity. My own experience was that of the Beharies employed as overseers, mohurrirs, etc., on my famine relief works, whether factory trained servants or selected from the more respectable higher caste residents, not five per cent. could be trusted to act with any decent show of honesty.

The pay appeared to be a slight consideration even when liberal, as they looked on their appointment as temporary and the desirable result to make as much by speculation and fraud as possible, while it lasted, and I feel convinced if only those who have something considerable to risk either in loss of permanent employments or pensions were employed, a considerable waste of money would be saved or not diverted from its intended object.

9. I would suggest that if possible, when the authorities decide that relief works on any large scale are necessary, the first step should be to appoint a sufficiency of officers for each sub-division of Behar, with power to try summarily any cases in connection with famine relief operations that may be sent to them by the Charge Superintendents, leaving the latter free to attend to their administrative duties, and that the Charge Superintendents should be selected from a body of men above suspicion which would necessitate higher pay, and that they should be taken from a class thoroughly accustomed to the languages and customs of the district to which they are appointed.

10. A great difficulty on the relief works was that the workers, living from hand to mouth, when paid in coin were unable to purchase grain on the spot.

Those bunniahs who supplied the cheaper grains at relief works did a good trade, but very few came forward to do so, any distance, even six to eight miles from the large Bazars or grain centres; grain should have been purchased at these Bazars and conveyed at Government expense to the different relief works, where it could have been put in charge of the village bunniah with police protection.

11. With reference to preventive measures I would point out that the whole of the district under my charge, and I might add a portion of the district extending to the east

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of it, could never suffer from famine if the natural resources of the country for irrigation were properly utilized. The first estimate made of stores of paddy alone held in the district of which I had charge was one lakh twenty thousand (1,20,000) maunds, which I believe proved to be fairly correct. The paddy germinated a fairly full crop, but for want of rain almost entirely dried up without any yield; the raiyats trusting for rain too late, although *bunds*, raised at very little expenditure, would have enabled them to irrigate much of the lands which would have yielded at least another lakh of maunds of paddy.

12. In conclusion the following, I believe, would be the most useful information to be considered by the committee, in arriving at a conclusion as to the practicability of irrigation schemes:—

- (1) Mr. Joll's survey of river levels of Tirhoot, made between 1872—74, showing the fall of the district.
- (2) Captain Armstrong's survey of the water sheds in connection with high level canal system, made in about 1874-75.
- (3) Sir W. Hudson's paper in connection with diverting the rivers Ananti, Dhananti and Harrah, into the chain of lakes commencing at Lalserryah through Motihari, Barrah, and Siraha to Motipur. These papers dated about 1876—78 should be amongst the records of the Behar Planters' Association.

(President).—How long have you been at Muktapore?—I have been 13 years in the Durbhanga district. I am Manager of the Muktapore Indigo Concern and had charge of the relief works connected with my own villages. I was not actually in charge of a circle but only looked after my own villages.

I see you mention that among the classes who came on the relief-works there were Kayasts. Were there many Kayasts?—A good many.

What was their profession ordinarily?—They were all cultivators. The only caste I mention there that were not cultivators was the weaver caste. They were the caste that were most distressed in the whole country.

Do these weavers now-a-days live by weaving?—Yes, by weaving.

Did the demand for their cloth fall off?—Entirely, I think.

Prices were too high I suppose for people to purchase clothes?—Yes, prices were too high.

How do you account for the number of women being much larger than the number of men?—I think the women were of two classes. There were women who were left dependent on themselves—widows and lonely females—women without men to help them. And others were women whose men had gone off to other districts for work. And others perhaps were women whose men were working on the relief works. I cannot account for it in any other way.

Does this part of Behar send out a number of men to work in different parts of India as syces, etc.?—Not many. They would be a very small number. A certain number go away temporarily every year for employment.

Some went away to Purnea. What did they do in Purnea?—I am not sure. I mentioned the disproportion between men and women because of the arrangements I had to make. To get these women employment I had to separate the works. On some works I employed boys and women and on other works I employed women and a sufficient proportion of men for diggers, and by that means I was able to organize the work in a satisfactory manner and employ the women that came on to the relief.

Were all these works adjacent works?—Within a couple of miles.

So that they rejoined each other in the evening?—Oh, yes.

Were the rates different where women were employed and where men were employed?—No, the rates were the same.

You say that you find gratuitous relief most demoralising. You think that people got gratuitous relief in the villages who ought to have been made to work?—I think so.

Had you charge of any village relief?—As Secretary of the Charitable Relief Fund I had the distri-

bution of pecuniary relief to them, and in that way I always tried my utmost to get some work done for the relief given.

Then you had nothing to do with the Government gratuitous relief and do not refer to that?—No.

From the Government Funds the rules were that nobody would get the relief unless they were unfit for work?—Yes, I believe so. But I had not the gratuitous relief under my own charge.

Do you advocate such gratuitous relief or would you insist upon people who want relief and cannot work going to poor-houses and kitchens?—I think that people who cannot work should be sent to kitchens or poor-houses. I think that the kitchens for adults would have been much better than grain doles.

We are told that Brahmins would rather die than go to kitchens or poor-houses?—I think they would go. I do not understand why they should object to the kitchens when there is their own cook. And all the Brahmins could be fed in one section apart from the other recipients. A kitchen they would not look on in the same light as a poor-house.

What is the system of payment by tokens you refer to?—Well, instead of the grain doles being given, tokens would have been issued and the recipients of the tokens would have been able to obtain any grain they liked from any bunniah they chose to go to. The bunniahs would present the tokens to Government in due course and get paid.

What kinds of speculation and fraud on the part of the mohurrins and overseers did you observe?—I think that, with a view to prevent speculation and fraud, cash payments when made should be made daily. When payments are not made daily, the lower officers have time to falsify and juggle with their accounts. On my own works I paid daily—whether it was task-work on the tanks or piece-work on the roads.

What was the difficulty relief workers have in getting supplies on the works?—In some cases the relief-workers who were paid in cash have difficulty in buying grain on the work. The reason was that the bunniahs were afraid to bring their grain to the works lest they should be rushed. On one occasion I myself was rushed when distributing Burma rice.

It was not that the bunniahs had no stocks of grain?—Oh, no. They could always obtain grain.

You think that *bunds* might have been raised with very little expenditure that would enable the raiyats to irrigate a considerable quantity of land which would have yielded at least another lakh of maunds of paddy?—I refer to the country that lies between the two rivers, Gundack and Bagmati; by bunding that, the raiyats themselves could have flooded their *char* lands and irrigated the whole country. It shows what they could have done when the rice crop failed. They did put up *bunds* and they irrigated a few hundreds of yards for *rabi* crops even after the rains had ceased. But I only alluded to that because it points to the inability of the people to make a combination for their own interests. They won't even go to the expense of making a *bund* which would have cost very little and would have proved very advantageous.

Do you think that the high level of prices was entirely due to failure of crops?—Entirely.

You do not think there was any sort of undue combination among the grain dealers?—I do not think so. It must be remembered stocks were low.

Were they active in importing grain?—No, very sluggish about it.

What reason was there for that?—They began very late to import grain.

Do you think that the Government ought to have brought grain from the large bazars for the relief works?—Yes.

Away from the relief works do you think the people had any difficulty in buying grain?—I think they had very great difficulty about it in the villages.

The petty bunniahs had not got the grain to sell?—I think not. To my knowledge they were importing from Mozufferpore.

(Dr. Richardson).—Why were they afraid of holding the grain?—For fear of being rushed.

(*Mr. Holderness*).—You said the bunniahs were rather sluggish in importing?—The petty bunniahs were slow but the large bunniahs were importing stocks.

At an early stage of the famine was there any talk of the Government importing grain?—I never heard of it.

It was not the idea that the Government was going to undertake the business that kept them back?—I do not think so.

This tract under your charge, was it very distressed?—No, it was not very distressed.

Is it a rice-growing tract? What is the chief crop?—It is about two-thirds rice. It is not altogether a rice-growing country.

What was the character of the rice crop?—A failure.

Total?—It was one-sixteenth.

A one-anna crop?—Yes.

Was that the cause of the distress?—That was the cause and also the previous *bhadoi* crop.

What do you put that at?—Six annas.

Then as compared with other parts of the district, was that part of the district not so distressed?—It was not so distressed.

Had the people generally in the villages any money or any food?—They had enough. Most of the cultivating classes had enough to tide them over. The non-cultivators ran utterly short.

Who came to the relief works?—Men that were generally dependent on the cultivators.

The agricultural labourers I suppose?—Yes.

Then the cultivators had enough to carry on?—I think so.

It was these labourers who required relief?—It was these labourers, weavers and people of that sort.

When the works were opened, did the people come to the works?—They did, but not till February or March.

How many works had you open at once?—I had about half a dozen tanks going on at once.

Did you manage to get a fair amount of work out of the people?—A very good amount.

From the very first?—Yes. From the very first.

Did you run your works on the Code system, paying a man the daily wage?—I ran it on the piece-work system but limited the payment. I did not pay until the whole task was done.

Then if they did not do their task, how did you pay them?—They had to do it.

The men were employed on piece-work?—Yes.

When you fixed the piece-work rate, was it a rate that you paid yourself in an ordinary season or a better rate?—The same rate.

Were the women and the girls working entirely separate from the men?—They had a certain proportion of men as diggers, but they were the only carriers.

Those gangs in which a few men were diggers and the rest all women and children, were they separate entirely?—Yes.

Were they weakly gangs?—No. They were not weakly, they were the most distressed.

But then who were the people that you put on the piece?—They were men only who were accustomed to that sort of work, the Dasads, Chamars and so on.

And they are the sort of people you, in an ordinary year, get on your own work?—Yes.

Did you hear any complaints from private persons who employ labour, that they could not get labour because of the attractiveness of the relief works?—No.

Was there any private work going at the time?—There was on the Raja's property adjoining mine.

On the indigo factories was there any work?—Was there much private work there?—At first only. The first sign of distress I saw was that women came in large numbers to clean my indigo lands. When that work was finished they had to go to the relief works as I had no more work to give them.

Now those tanks that have been made, are they of much use?—Very useful for the villagers and for the cattle.

They are of no use for irrigation?—Not the slightest.

Have the roads that were done, been useful?—Very useful.

If there is another famine, are there still roads that can be taken up?—Yes, and those roads already done can be improved.

I think more tanks can be made?—Yes, and existing tanks can be re-excavated.

Is there any other work you think of taking up that would be of more use?—Irrigation works.

Have you any special works in view that could be taken up?—Yes. I think there are some schemes that might be taken up.

Do you know why those were not taken up?—I cannot say.

Now you say that in this gratuitous relief the grain dole is demoralising. Have you any facts about that to show how it demoralises people?—I give one instance. I noticed on one occasion that some women came up to the children's kitchen, and as they were certainly over the age, I enquired why the women were there. I noticed that they were most emaciated, and not fit to be turned away. Then I enquired what the reason for this was. They told us that $3\frac{1}{2}$ seers of *rahar* had been doled out to them as a week's supply, but that the Chowkidar had taken 1 seer out of it.

(*Mr. Bourdillon*).—Who then do you mean is demoralised by gratuitous relief?—The people who received it or the people who gave it?—The people who gave it.

Those women who were thin and emaciated, do you think they were sufficiently strong enough to come and work at one time?—I cannot say.

(*Mr. Holderness*).—You remember the famine of 1873 and 1874?—Yes.

Do you think that the distress in your neighbourhood, as far as you could see, was greater in 1897 than in 1873-74?—The price of grain was dearer in 1897. The results were not so bad. What I mean is that prices in 1897 were much dearer than in 1873-74, but that the arrangements made in 1873-74 were not nearly so good as those made this year. This year the people wanted a repetition of 1873-74, namely, pay without work, but they did not get it.

(*Mr. Bourdillon*).—What about the crop failure in those two years?—I do not remember.

Where were you in 1874?—I was in the Mozufferpore district; in the Dhooly Concern which is in both Mozufferpore and Tajpore Sub-divisions.

(*Dr. Richardson*).—Did you see any deaths from starvation?—Only one case, a woman of the weaver caste with no relatives.

And that was due to hunger?—I think it was.

That was the only case?—Yes.

(*Mr. Bourdillon*).—Where did that take place?—It took place in a village I knew of. The case was reported to me and I enquired into it. I think it was a starvation death.

(*President*).—Was village relief going on in the village at that time?—Yes.

Mr. T. R. FILGATE, Manager, Burhault Indigo Concern, called in and examined.

I put in a written statement of evidence.

I have been resident in North Behar for over 21 years. I have given voluntary assistance to the District Officer of Mozufferpore in 1892, in superintending a small relief

work in that district; again on three small relief works in the Saran district from January to September 1897. Undoubtedly the timely measures taken by Government saved the people from getting into a low state; and, as

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Mr. T. R. Filgate. soon as the rain fell, they were in a condition to resume their usual field work.

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1898.

I. For the Saran district, relief circles should be factory *dehats*, not thana circles. Indigo Managers should be asked, through the Behar Planters' Association, on the first signs of approaching scarcity, to have a statement prepared in the annexed form (A), and the same forwarded to the Collector.

II. *Relief Works.*—Small works in the vicinity of the peoples' homes are the most suitable. The District Board should always have plans ready for improving main roads in each circle, as well as a list of the most suitable sites for tanks to be dug or improved. Sites should be selected that are likely to benefit the public generally, not merely a few individuals.

As the Saran District Board are unanimous that the expenditure on tanks and roads in this district is undesirable, since there are more roads than they have funds to maintain, and since, owing to the nature of the soil, tanks silt up unless they are periodically cleaned, the Public Works Department should have ready prepared one or two schemes for either canals or a feeder line of Railway running through or across the district.

Money expended on canals or railways would not only be of undoubted benefit to the people, but would also give Government a return on the outlay.

A considerable saving to the State could be effected by advancing money, without interest, to Zemindars or well-to-do raiyats for the purpose of repairing existing embankments surrounding *churs*. The correct expenditure could easily be checked by the earth-work measurements.

Large works should be under the Public Works Department entirely—*small works* under the District Board. For these latter the Collector should have the option of fixing the task and rates, since a stringent rule is not always applicable to all the circles in his district. The main difficulty in Saran is that a large proportion of the able-bodied male population emigrates temporarily every year, and the women and children are left at home. These, with the exception of the very old, feeble, infirm, cripples and children under the age of five, are capable of doing a fair day's work and earning enough to keep them in health; but they are unable to do the prescribed task as laid down in the Code.

III. *Gratuitous Relief.*—Generous and humane landlords have taken care of and provided for the paupers and infirm on their estates; but I have known cases in which well-to-do zemindars have not done so. Government should have periodical lists furnished by landlords of the paupers on their estates; and it should be compulsory on the landlords to take care of them in accordance with their means. Failing to do so, the landlords should have to refund to Government the actual cost of gratuitous relief to paupers on their estates.

IV. *Agricultural Loans.*—These are of the greatest benefit to the raiyat; and it is more economical to the state to aid the raiyat by such advances than to offer him work and wages, provided that he holds land, that the bonds are to batches of the same village, that all are jointly and severally liable, and that these Government loans take precedence of all mortgages, Mahajans' advances, etc. I have had personal experience in distributing loans in 1892 and 1897. The former were all recovered, and those of 1897 are being collected as the instalments fall due without any hardship to the raiyat. Thumb impressions should be taken from each raiyat as he receives the advance.

V. *Remission of Land Revenue.*—If a landlord can prove to the satisfaction of the Collector that he has allowed his rents to stand over until a good harvest or two harvests have been gathered, some leniency should be shown him regarding the Government revenue. If it is found that

he has misled the Collector, he merits the severest punishment the law can inflict on him.

VI. *Private Charitable Relief.*—I had charge of two divisions of the Mashrak Circle, and distributed money payments to the *parda nashins* in my *staka*. It was of great assistance to them, and, from careful enquiries since made, I have found that the money reached those who really were in need of it.

Small loans to the raiyat, without interest, to buy seed with, is the most suitable form in preference to donations. The loans should be recovered one year after receipt; but if it is found that the raiyat is unable to repay, the money can then be given him as a donation. Indiscriminate distribution is wrong; and, if the people are told they can get these advances as donations, nine-tenths of the raiyats will come forward; and those who really require help will not get it, as the money will go to many who do not require it.

VII. *Mortality.*—The effect of the measures taken by Government in the Mashrak Circle, was to keep alive some three to four per cent. of the people who would have died in ordinary years. The sanitary arrangements on the works were most successful; and, in my experience, with the Permanganate of Potassium properly used in the water-supply, cholera cannot only be stopped from breaking out, but, when it does break out, it can be stamped out.

VIII. *Pressure of population.*—This is, no doubt, one of the greatest problems in Political Economy that the Government of India have to face. The raiyat of Saran will not practise the Malthusian doctrine; and every effort should be made to encourage emigration to those parts of India that are sparsely populated; and the day may come when compulsory emigration will be necessary.

IX. *Stocks of Food.*—The experience of the past year shows that the people had more food in hand than they are allowed. Had this not been the case, at one time the stocks would not have been sufficient to meet the demand. Government, in order to keep down a ring of grain-dealers, should pay the relief workers in grain.

X. *General.*—The Government standard weights should be introduced throughout Behar. The standard copper coinage should be used, and the circulation of Lohaya and Gorakhpuri, or dumpy pice, abolished.

The people of my *dehat* acknowledge, and are most grateful to Government for, what has been done for them; but they are still as superstitious as their forefathers, despite the spread of education, and as ready to believe and credit the most silly and ridiculous rumours that have been spread and are still being spread, particularly in regard to Plague regulations. Even the well-educated men amongst them are as credulous as the most ignorant raiyat. The year 1897, attended as it has been by the convulsions of nature, has shaken the nerves not only of the native population, but also of some Europeans.

Any reforms or regulations introduced should be undertaken by Government only after careful enquiry from their Divisional and District officers; but, once introduced, should not be withdrawn. Any attempt at disturbance or sedition should be put down *immediately with a strong hand*, even at the expense of a few innocent ones. District officers should be empowered to deal at once, and in the severest manner, with rioting, and not have to wait for an order from higher authority. A bucket of water will quench a few sparks; but, if time is lost in waiting for a fire-engine, it may take all the engines available to put out the conflagration that would not have occurred had the first small blaze been extinguished. In such matters *obsta principes* is the rule to follow.

(President).—You have been 21 years an indigo planter in Behar?—Yes.

You gave voluntary assistance in 1892, as well as in the recent famine?—Yes, there was a little scarcity in 1892.

I see you say for the Saran District relief circles should be factory *dohats*?—Yes; such *dohats* practically cover the whole district.

Then did all factory owners or managers give voluntary assistance?—I think most of them did. The Association volunteered its services.

You say small relief works in the vicinity of the people's homes are the most suitable. Why?—In preference to large works, because people do not care about going any distance from their dependants.

If the works were started only at a distance, they would not go?—No, that is in regard to main works.

In some parts of India there is no difficulty about getting people to go a long way. Are these people peculiar in this way?—I am only speaking of my own particular circles. Most of the able-bodied men migrated to the east. The difficulty was to provide for the women and children and the weaker men.

The men migrate for the harvest?—Yes, for the cold weather, and go to roads, railways, etc. They return about May or June.

They leave their women behind?—Yes.

You suggest that advances should be made to Zemindars or well-to-do ryots for the purposes of embankments, and that a considerable saving to the State could thus be effected. Do you mean that the State would not have to establish so many relief works?—That is as regards small relief works. The Zemindar has not got the money, and the State would give it to him.

He would only employ the most able-bodied men he could get?—I think he would employ a great many in want of employment.

Was anything of the sort done in the way of loans?—Not that I know of.

What class of people came to the works?—Mostly the labouring class who work in the fields. A few *Assamis* came.

Did the women and children of the *Assamis* come without the man himself?—Yes, a few did.

Do you think that all who came were really hard up?—As a rule I think they were.

You say, as regards gratuitous relief, that landlords should be compelled to take care of the infirm and paupers on their estates. That would require legislation, would it not?—Yes. In many cases a well-to-do landlord would do nothing for anybody on his estate.

Some did a great deal?—Some did.

What kind of agricultural loans were you concerned in advancing?—Small advances of five and ten rupees.

For seed?—Yes, and one condition was that they were to sow *chrena*. It was of great assistance to them.

It grows in both harvests?—Yes.

The District Officer authorized you to make the advances?—Yes.

The loans were recovered without difficulty?—Yes.

These thumb impressions you refer to, were they in ink?—Yes.

Are the indigo planters in your part of the country responsible for the land revenue?—No. The landlord is responsible. We hold leases, and the indigo is grown on rented lands and for which the landlord, not Government, receives the rental.

Were you in charge of village relief?—Only the *parda nashis* under the Indian Famine Charitable Relief Fund.

Were they mostly Hindus or Mahomedans?—Both, but mostly Hindus.

Generally widows?—Nearly all widows.

What class did their husbands belong to?—They were Rajputs and Brahmins.

Landholders or tenants?—They had been tenants in the villages; there were no big people, not well-to-do.

You say the effect of the measures taken by Government in the Mashrak Circle was to keep alive some three

to four per cent. of the people who would have died in ordinary years. Do you mean to say that some people were better fed this year than in ordinary years?—Yes, old people, cripples, the infirm and those who were starving were kept alive by gratuitous relief.

Did you see any case of death from starvation?—No, not one death from starvation.

Were there any cases of death accelerated by disease?—Not a single case from actual want of food.

How did you use the permanganate of potassium in the water?—We mixed it in a *gharra* of water and then poured it into a well; the water was then thoroughly stirred till it became a pink tint. It was then allowed to stand for 24 hours. The people are beginning to appreciate it. It undoubtedly checked the cholera.

Was there any opposition on the part of the people?—No.

Do you recognize that the increasing pressure of population is the great problem in Saran?—Yes.

Do you think that with an increase of population there is any improvement in intensity of cultivation, that is as regards skill, so as to make the land produce more?—As regards Saran I think the cultivators are the best in Behar. I think they get as much from the land as possible. English agriculturists have very little to teach them in the way of agriculture. The Saran raiyats are far ahead of the raiyats of other districts.

In Saran is the population very dense?—Yes.

You say that experience of the past year shows that the people had more food in hand than allowed. Do you mean cultivators?—Yes, cultivators and the coolies themselves. I had a careful estimate made of the food-supply and the numbers of the people; this showed that they had not nearly enough food, and still they lived well, with the extra assistance they received. That shows that it is impossible to arrive at an estimate of the amount of food they would have.

Do you think the level of prices was due to failure of the harvest or what?—Principally to the failure of the harvest and to the stocks being so short.

You say that Government in order to keep down a ring of grain-dealers, should pay the relief workers in grain. Was there a ring?—In some small places I think the *mahajans* kept prices up for a little while.

How would Government get the grain?—I have not thought of that.

Should they import the grain and pay in grain instead of in cash?—Yes.

Do you think that would make the bunniah, who supply the outside public, moderate in their prices?—Yes, that would prevent them holding out for high prices.

Might it make them slack in importing grain?—I don't think so. The experience of the famine of 1874 showed that private trade imported a large quantity, and that Government importing did not interfere with it.

These general suggestions that you make about Government standard weights and standard copper coinage, have they any particular reference to the famine?—I think so, especially with regard to the coinage. The coolie does not get the full value of his money. It is always to the advantage of the bunniah because he goes into fractions of a pie.

(Mr. Holderness).—Were you in charge of any relief works?—Yes, small works, one tank which took over 51 days.

Did you manage to get a good deal of work from the people?—The earth-work cost Rs 4-10-2 per thousand cubic feet.

If you did it yourself, what would it have cost?—It cost very little over what I could have done it for.

Was it Government money?—Yes, I had the sanction of the Collector to it. If I raised the rates the people would not have been better off; they did not deteriorate in the least.

Was it piece-work?—No, task-work. There were two or three alterations made by the Collector. The difficulty was the excess women and children over the diggers. We divided them as well as we could, and got some of the women to dig; we paid them the digger's rate and paid also the children. That kept them going and in good fettle.

Mr. T. R.
Fulgate.
29th Jan.
1898.

Mr. T. B. Filgate. One day their pay was cut and they struck; they returned the next day.

29th Jan. 1898. You did not pay much in excess of ordinary rates?—No.

Were there any complaints on the part of private employers of your drawing away labour?—About us there were none. As soon as indigo works were started Government works were over, and so the people returned to indigo.

Was there a large demand for employment?—Yes, at this season there always is.

You might open a relief work any day?—Yes, unless you are very particular.

You had nothing to do with Government gratuitous relief?—No, but I checked the lists for my own villages.

Do you think the right people got it?—Yes certainly, speaking of my own villages.

Were these low caste people chiefly?—Yes, mostly; there were a few of high caste.

Did their accepting the relief affect their social standing?—I don't think it did. There was one particular case. There was a woman of the *parda nashin* whose class husband was away. She was practically starving and received some money. When her husband heard of it he insisted on her returning the money to the Charitable Relief Fund.

Did the low caste people want to come on to gratuitous relief?—Yes, many wished to come whom we could not receive.

If you had not given this relief, would there have been an excess of mortality?—Yes, certainly, very heavy.

MR. R. S. KING, Assistant Manager, Darbhanga Raj, called in and examined.

Mr. R. S. King. I put in a written statement of evidence.

29th Jan. 1898. (a) It was on my recommendation that piece-work was adopted in the Darbhanga Raj as the basis for famine relief, the rules and system on which it was carried out were those suggested by me.

The system worked so satisfactorily that it was never found necessary to alter it from beginning to end of the famine. A copy of the working rules can be supplied if wished.

Briefly speaking, the work was all laid out in numbered plots (as in the North-Western system) beforehand, and the value of each explained to the worker, and plots given out to gangs equal to about three to four days' work and paid for on completion.

All alterations to improve Government systems approached ours, and the more they were revised the more even became percentages of population on the Government works as compared with ours.

As long as the Bengal Code was attempted on Government works no workers came to any Raj works within three miles of a Government work, but attended the latter for preference.

(b) The efficiency of above system is proved—

(1) by the fact that there were no deaths from famine;

(2) that in no case had the Government to step in to give aid to Raj raiyats who were kept up to a standard of strength that enabled them to fend for themselves on the return of favourable weather for agricultural operations, and the works being carried out near their homes, kept them in touch with their farms, and did not pauperize them and render them hopelessly dependent as works at a distance might have done.

(3) that no serious instances of cheating occurred as happened repeatedly on Government works, before piece-work was introduced, and this more than compensated for any slight increase in the numbers on gratuitous relief. That the people have not been pauperized is clear from the elasticity shown in the way they have cultivated their holdings, taken upon themselves the support of all the poor and helpless who were on gratuitous relief, and paid their rents, including a good part of the last year's arrears without difficulty.

Do you advocate loans in a famine year?—Yes, (a) loans to Zamindars for improving embankments, and (b) loans to raiyats themselves, to assist them.

In that case would these relief works have been unnecessary?—Yes, I think so, if Zamindars had started *bunds*.

Did not Government offer money on loan?—There was some offer for making wells. I don't know if any were made in that way.

Would people avail themselves of the offer?—I think they would in this case.

(*Dr. Richardson*).—Do you think the lot of the people is getting harder in consequence of the increase of population?—I think the struggle for existence is.

Do you think the probability of famine in the future is greater than in the past? Have not railways and canals lessened the chance?—The railways only enable Government to distribute the food, but another famine is, I think, liable to be more acute in consequence of this increasing density of population.

(*Mr. Rose*).—In carrying on your relief works on the task-work system did you find the existence of the minimum and the penal wage a difficulty?—If so, how did you deal with people who preferred doing little or no work, and getting only the minimum or the penal wage, as the case may be? They tried to come and draw the minimum wage and do nothing; we used to fine them; we said you must work if you want your day's pay. Those who refused to work we paid nothing; then for several days they did a fair day's work.

(c) In working piece-work with the above system we had of course the advantage of thorough local knowledge of the villages, and could enforce that women and weaklings should be included in the gangs of their fellow villagers. But at the same time I consider piece-work would prove efficient in all cases. The workers where needful might be put in three classes—

- (a) professional earth-workers.
- (b) all others, not weaklings.
- (c) weaklings.

If it is intended (as was done in the Raj) that an able-bodied man should get no gratuitous relief for a wife and two infants, but support them from earnings (other weaklings of family being given gratuitous relief), I would recommend that ordinary local earth-work rates be given to (a) professionals; 20 per cent. higher to (b) class; and 50 per cent. extra to (c) class. Sunday allowance (= $\frac{1}{2}$ of a day's earnings) to be added to above by simply giving $\frac{1}{2}$ additional at time of each payment.

(d) It is my opinion that it would be quite possible to prevent failure of the rice crops in North Darbhanga district if some rough practical and comparatively cheap measures for irrigation are taken in time.

To effect this (1) some main channels should be made now in places where they would be useful to divert the river water (when banded) into old channels which are the natural distributaries in the rains, and some distributary channels or pynes should be made where natural ones do not exist. If all these channels were in existence *before-hand*, all that would be required would be to put temporary embankments in the rivers in October. As the country is an inclined plane with a fall of over three feet in the mile from north to south, the water could be carried practically anywhere.

Owing to local knowledge gained by 8 years of tiding round the villages, I was last year enabled to, in one place, bund the Komla river in the beginning of November in time to irrigate some 15,000 bighas of the green rice and secure a bumper crop in it. (If I had had channels ready and professional engineering assistance to make dams I could have secured eight or ten times as much.)

As it was, I constructed some 10 miles of channels later on, and made dams which gave a full supply of water for about 5,000 bighas standing *rabi* crops, and about 35,000 bighas of rice lands were later on irrigated when rains were insufficient in the current year, thus securing full crops where they would otherwise have been poor, and

giving agricultural labour in the distressed villages (the soundest kind of relief).

With the channels now ready and the experience thus gained, I am now in a position to greatly reduce the chances of failure of rice crop in my villages if rains fail again. If I can do this from mere practical local experience much more could be done with professional help.

The total expenditure incurred by me in damming and diverting the rivers, as above, did not come to more than $\text{Rs} 12,000$ (or a few annas per bigha on 50,000 bighas).

I am not in favour of any attempt at heavy expenditure on permanent irrigation works as there is too much shifting of river courses and silting going on.

An examination of rainfall records shows that shortness of rainfall has recurred only once in every five to seven years, and only on such years would irrigation be required and raiyats be prepared to pay canal rates, so a canal system would never do.

(President).—How long have you been in the Darbhanga Raj?—Eight years.

Where was the distress severest?—Most in the northern side of Darbhanga.

Is it a rice country?—Yes.

What was the failure like in 1896-97?—I have two Raj circles in my charge spread over a tract of country ranging from the Nepal frontier on the north to the Tirhoot State Railway on the south and from 8 miles east of Madhubani on the east to close to Katra Thana in Mozufferpur District on the west or about 29 miles north to south and 34 east to west, I was continually riding over this tract covering 20 to 40 miles daily:—(1) south of Beniputti Thana; the population is about 60,000; that was the most distressed of all; (2) the larger Circle lies in and around Madabani Thana and has a population of about 180,000 or so. Distress was not so severe in the larger Circle. The outturn of rice in the Beniputti Circle was practically nil.

Is it your experience that the Assamis are in the habit of storing grain for their own consumption to any extent?—Yes, the average Assami does. He stores enough for his family and for himself while he is labouring in the fields.

When did relief begin?—The first relief was opened in January.

When did it close?—At the end of August.

When the bhadoi was reaped?—No, when the rice planting was in full swing.

Who fed the labourers; the agriculturists?—Yes.

Had they grain or money?—They borrowed money from us or from mahajans.

The Raj gave out a great deal in advances?—Yes, on a rental of 5 lakhs I gave about $\text{Rs} 1,20,000$.

With interest?—Without interest. To be repaid in January 1898.

(Mr. Holderness).—Are the advances being repaid?—I have been absent since the 15th of the month. I have just called for repayment. In former loans we have never taken interest.

(President).—What relief works were carried out by the Raj?—In my charge to the extent of $\text{Rs} 1,32,000$ or with establishment and contingencies of $\text{Rs} 1,50,000$.

What class of works were they?—Chiefly irrigation tanks for villages; re-excavation of old tanks for irrigation.

Are they rain-water tanks or fed from springs?—Both.

Is the country well provided with them or not?—The country is very fairly provided with them. There is a large Brahmin population (about 75 per cent.) who are accustomed to have such tanks dug.

(Mr. Bourdillon).—Who are accustomed to dig or cause them to be dug?—A great many dig themselves, i.e., with their own funds. Besides our relief works, some 50 or 60 tanks were made by well-to-do men, raiyats or shopkeepers. We gave them the land free.

(President).—They paid for the work?—Yes.

Who did they employ?—They employed chiefly professional labourers. They took them from our works.

What sort of classes came to your works?—All classes, but very few Brahmins.

Did many cultivators come to your works or were they mainly labourers?—Mainly labouring classes; the district consists mostly of Brahmins.

Most of the cultivators are Brahmins?—Yes.

You say briefly speaking, the work was laid in numbered plots. Were these of equal value?—Yes.

And of equal size?—Yes.

The plots were given to the gangs?—Yes, at the opening of works I gave them advances of 8 annas which were deducted in the first month of working.

What did you do if they failed to do the work in time?—I paid them on completion.

As a matter of fact, did they work to time?—Yes.

Did you begin by trying task-work?—No.

You began at once on piece-work?—Yes; I considered it was impossible to have any control, unless we had piece-work.

Did they often do it under the time?—No, after the first week or fortnight it was easy to estimate what they would do.

The people formed the gangs themselves?—Yes. The villages of one village were kept together and allowed to form their own gangs.

They were generally small?—They ran from 15 to 50.

Was there a mate over each?—Yes.

What was the rate of pay?—He got one anna per rupee earned by his gang as commission.

Did they bring in dependants, the old people and young children?—They did not bring in the people, but there were some babies.

Were the works near the villages?—Within a radius of about 2 miles.

What system of relief was there?—A liberal rate was allowed on piece-work. It was the rule that a worker should be able to support his wife and two infants, and a woman should be able to support one child. The old people were given gratuitous relief at the rate of 10 pies per head.

They got it at the village?—Yes.

Who were the authorities who paid them?—The village shop-keepers and headmen. The shop-keepers were responsible to me direct. The headmen were on a sort of committees who had to report if any persons requiring relief were to be added to the list, and who added them, if necessary pending inspection.

Was it fairly done?—Yes.

I suppose the officials of the Raj have great knowledge of the villages?—Yes. I went round myself with two European assistants and two hospital assistants.

The Maharaja has a large European staff?—Yes.

Are Patwaris officials of the Raj?—Yes.

What pay do they receive?—Rupees 5 a month, average.

Did you ever find it necessary to have two rates for plots, one for strong and the other for weaker men?—It never came to that. I was ready with a plan but never found it necessary to introduce it.

You say as long as the Bengal Code was attempted on Government works no workers came to any Raj works within three miles of a Government work, but attended the latter. Do you mean they attended them in preference?—Yes.

Is that true of the workers who belong to the Raj?—Yes.

Did they go on Government works when the Government system was altered?—Then they had no partiality for either.

(Mr. Bourdillon).—How long did that first stage last?—I think one month or a month and a half.

(President).—You heard of no death from famine?—I had reports, but found on inquiry that they were due to illness. I went myself or sent an European Assistant.

You say the people have taken upon themselves the support of the poor and helpless who were on gratuitous relief. You were satisfied that that was the case?—Yes.

(Mr. Holderness).—That is, they were only returning to their own system?—Yes; the people are very charitable. Until the famine, I had no idea so many people depended entirely on private charity.

(President).—Have their holdings been as fully cultivated as ever?—Yes; except in some few villages; about one-eighth of the rice area was left uncultivated, where irrigation water did not reach.

Mr. R. S.
King.
29th Jan.
1898.

Mr. R. S. King.
29th Jan.
1898.

You say that some main channels should be made in certain places. Do you mean that the channels should be made but not used, except when wanted?—Yes.

(*Mr. Holderness*).—Who would make the channels?—The Raj is making them as far as required for the general use of its raiyats. I think the Raj would do all that is required in that way for its own villages.

Is there any Government irrigation project on?—Mr. Buckley, the Superintending Engineer, came up in April to see if anything was feasible. He came to the conclusion that it would be too expensive and was not at all suitable, because the raiyats would only want the water once in six years.

Speaking of advances to raiyats, were these for subsistence or for seed?—I gave them in some villages because they said they required them for subsistence, but the bulk was for seed.

Did you continue to give them for subsistence?—Only once, there were no crops to fall back upon.

(*Mr. Holderness*).—Are the rents in arrears?—Yes, from the Brammins.

Are there any special remissions for the famine?—No.

They are cash rents?—Yes.

(*Mr. Bourdillon*).—There were suspensions?—Yes. It was left to my discretion. I suspended collections from January all over the tract.

(*Mr. Holderness*).—Do you expect to get these rent in?—Yes, I hope so.

Are the rents high?—No, I don't think so. They are full rents, but not excessive. I could get an increase always when settling lands.

What was the average wage of a piece-worker?—For men, women and children the whole average is one and a half annas.

Were your works more expensive than in ordinary years?—A good deal more expensive. I should think between 25 to 50 per cent. more expensive.

I suppose these piece-workers earned enough to keep their dependants?—Up to a certain number.

Had you very many on gratuitous relief?—At the end of the relief works we had a considerable number, but while works were going on, there were not many on gratuitous relief.

(*Mr. Higlam*).—Did you impose any limit on the earnings of piece-workers?—No.

Can you say how much they earned?—The average came to one and a half annas per head. The male workers were 70 per cent., the female 23 per cent., and the children 7 per cent. of the total workers.

Do the people prefer working by the piece?—They would prefer a daily wage of course.

You never tried the daily wage?—Only for dressing work and laying it out.

(*Mr. Bourdillon*).—Till this famine came you did not realize how many were in receipt of private charity. Have you formed any estimate?—No. I believe people received charity even at the end when distress most pressed.

Is 3 per cent. fair?—I think so.

(*Mr. Holderness*).—Did you get some work out of these people?—The only work they were fit for was the sifting of grain and winnowing of corn, and this was done by the owners themselves during the stress of scarcity.

They are useful in the villages?—To a very small degree. It is a kind of charity.

Mr. D. J. MACPHERSON, C. I. E., Magistrate and Collector of Champaran, called in and examined.

Mr. D. J. Macpherson. I put in a written statement of evidence and written answers to the Commission's questions.

29th Jan.
1898.

FIRST HEAD.

The measures of relief under the Bengal Famine Code, which it was found necessary to undertake in the District of Champaran, were limited to the following:—

(I) Employment on relief works for all applicants for relief who were fit to do any work at all.

(II) Village gratuitous relief under Chapter V of the Code at the rate specified in section 44 of the Code—namely, half a standard seer of raw grain per diem for adults and one quarter of a seer for children, distributed in the following manner:—

- (a) To all eligible for such relief under section 42 and entered in Register 13 who attended at relief centres—usually one for each circle or sub-circle—on a fixed day in the week.
- (b) At their homes to all registered as similarly eligible who sent their tickets to such centres on the fixed days by recognised proxies, and had good reason for not attending personally.
- (c) For a time also, at the beginning, in a number of circles, to all registered as eligible, at their homes, by an order on the village provision dealer to supply them daily at a fixed hour in the presence of the village headman, etc., at the above rates.

[N. B.—Alternative (c), which is authorised by section 44 of the Code, was allowed throughout to all unable to attend the relief centres who preferred it to obtaining their dole through proxies, but it was not availed of, and circle officers thought it might operate to the disadvantage of the recipient.]

(III) Relief by money doles, and sometimes in cooked rations, to dependants of relief workers actually attending the works under section 83 of the Code, adult dependants, however, being relieved thus only very sparingly.

(IV) Relief by daily cooked rations at kitchens under Chapter IX of the Code to all who had been registered as eligible for gratuitous relief under section 42, and not merely to adults dependent on relief workers and children, as contemplated in sections 119, 120 and 121.

[This system was introduced generally at a comparatively late stage of the operations as a substitute for relief under Chapter V, except in the case of those physically unable to travel daily to the kitchens: sleeping accommodation was, however, provided for those who chose to avail themselves of it].

(V) Relief by cooked rations to those who resided regularly in poor-houses under Chapter VIII of the Code—generally beggars, idiots and invalids with none to care for them.

(VI) Relief to starving wanderers by the station police under section 166, and by circle officers under section 33 of the Code.

2. With the exception of these six measures of relief, no action authorised by the Code was necessary, except that in return for gratuitous relief under Chapter V, women capable of spinning were given cotton to spin and a few weavers thread to make into cloth, as contemplated in section 45 of the Code. This was not regarded as special relief under section 143. So far as artisans in want were unable to do ordinary work on relief works, they got employment in making hoes and baskets for these works, and in other operations subsidiary to them. It was not necessary to take measures for the protection of cattle, nor are there any Government forests in this district. Wages had not to be paid in kind nor grain imported by Government. It was impossible, in consequence of want of staff, but at the same time unnecessary to have special relief work hospitals, under medical men, at more than two large works; the famine hospitals established at various relief centres affording adequate medical relief.

3. The departures from the Famine Code system, omitting details of no significance, are described below:—

(I)

In task work, after the first few weeks, only two classes of labourers were recognised in tasking or fixing the scale of wages, namely, diggers and carriers, but distinctions were made as between men, women and big and small children. In effect therefore the A, B, C, and D classification of relief workers was ignored except for the purpose of the statistical returns. Workers of D class unable to carry earth up an incline in baskets were employed on untasked work, such as patting and consolidating earth. There were others

also who were paid by daily wages irrespectively of a fixed earth-work task, namely, special gangs of practised dressers for earth-work, of water-men, conservancy peons and the like. Dressing was, however, done according to a fixed task, but as it had to be in superficial feet it could not be shown as task-work in the prescribed returns. All that I have said, however, as regards untasked labour forms no departure whatever from the Code, and is mentioned merely to supplement the remark that only two classes of labourers were recognised in fixing the scale of wages. As regards the mode of fixing the task, it seems desirable to enter into some detail in describing the system adopted, as, owing to want of precision in the Code, it is not at first sight clear how far the system constituted any departure from its provisions, or at any rate from its principles. The Code (section 66) contemplates an estimate being made, on the basis of the table in Appendix IV, of the quantity of earth that can be excavated and carried by a gang as a whole, or, if necessary, by individual labourers, by a fair day's labour. In this table the digger's task for an A class labourer in soft soil—the predominant soil of this district—is given as 150 cubic feet. This task was prescribed in this district as a digger's task from the very beginning, no distinction being made between diggers of various classes (A, B, or C). No attempt was, however, made at the outset to apportion the number of carriers to diggers, as the rule on this subject, laid down in paragraphs 10 and 11 of the extract, from the Bengal Government Resolution No. 737 T. R. dated the 5th October 1892, reproduced in Appendix IV, related only to piece-work as the ordinary system, and contemplated task work being permitted only "for persons of slightly inferior physique." Nor was any attempt made to fix a carrying task for each individual member of the gang on the basis of the table in that Appendix, as the system seemed complicated and not easy to regulate according to the digger's task, and the available staff was quite incapable of applying the rules. In fact, the assumption was tacitly made that it would be sufficient if the diggers were definitely tasked, and there would always be enough carriers to take the earth away. Subsequently, on the 21st of January, instructions were issued by me definitely regulating the proportion of carriers to diggers, and this was the rule throughout on works under the Civil Department. The same method was adopted also by the Public Works Department, after the issue of the Chief Engineer's letter No. 1661 M. P. I., dated the 16th of March 1897, enclosing diagrams showing the proportion of carriers for varying loads and lifts. Prior to that, under Resolution No. 420 M. P. I., dated the 25th January 1897, the task had been fixed on works under the Public Works Department according to the number of adult males and females and of children of 14 years actually composing a gang, under the Task Tables attached to that Resolution, on the assumption that all were A class labourers. This was apparently really what the Code contemplated, subject to modification in the case of labourers of B, C and D classes. In the matter of regulating the task according to the diggers only, there would thus appear to have been no departure from the principles of the Bengal Famine Code once the proportion of carriers to diggers was definitely laid down, as the latter was only another and simpler way of regulating the task for carriers than that indicated in the table in Appendix IV of the Code. But in the actual amount of the task there was a departure, for no distinction was drawn between labourers of A, B and C classes (D class people were not employed as diggers at all), and the task was fixed, under the orders of the Commissioner, at 200 cubic feet instead of 150 as in the Code except for reasons specially recorded in each case. As fining for short work was, under my instructions, by grades of 12½ per cent. so as to avoid fractions of a pice, the task entitling to a full wage became, however, 175 cubic feet: but for works under the Public Works Department the Chief Engineer allowed a margin of only 5 per cent., so that the full task became 190 cubic feet. When women were diggers they were given only two-thirds, and sometimes half of the above task. In the matter of fining, I may say that to stimulate exertion I adopted the principle of fining double the proportionate deficiency in the outturn of work, e.g., for a deficiency of one-eighth the fine was one-fourth of the maximum wage. This constituted a departure from the Code, which contemplates fining being in proportion to the deficiency (sections 67 and 71). The effect of it was that a deficiency of about one-third entailed the penal wage.

To sum up, I consider that the only real departures, except temporarily, from the provisions of the Code in the matter of tasking and fixing wages were:—

(1) Ignoring distinction of classes in fixing the diggers' task, those unable to perform it being employed as carriers;

(2) Raising the diggers' task from 150 to 200 cubic feet.
(3) Fining for short work double in proportion to the deficiency.

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(II)

For a short time at the beginning of the operations, when they were being carried out under the District Board, the District Engineer, finding it difficult with the staff at his command to pay wages on the scale laid down, with a maximum task fixed at 150 cubic feet, adopted the system of paying the labourers according to the quantity of earth excavated at the rate of Rs 8 per 1,000 cubic feet. This was practically piece-work. Nominally there was a maximum, as he instructed his sub-oversersers that a gang was not to be paid more than what the daily wage of the numbers at the maximum rate would come to, but this provision was not really observed in practice owing to the inadequacy and ignorance of the staff. The system had the effect of doing away with a minimum.

(III)

In April the adoption of piece-work pure and simple was sanctioned on two large works—the Tribeni canal and the Bagaha Railway. This was a departure from the Code, though not from para. 132, Part I of the Famine Commission's Report, except that, owing to closing of all task works within a distance of about 12 miles, the labourers had not the option of choosing between the two. At first there were no differential rates: but at the end of June, when it was found that weakly people could not be removed from the gratuitous relief lists or poor-houses or kitchens, when fit to do some light work, a section at a privileged rate—double the standard one—was opened for these: and as they improved in physique with better feeding and steady work, they were drafted on to another section at an intermediate rate, and finally on to the standard sections.

In August also, task-work was abolished almost entirely, and piece-work at a low rate introduced generally in accordance with the principle laid down in the last sentence of para. 132, Part I of the Famine Commission's Report, although not really needed to induce people to go back to their ordinary work.

(IV)

In works under the Public Works Department all children, apparently under 10 years of age, were treated as non-workers, and up to 16 years of age they were not treated as adults. Under the Civil Department the Code system (section 62) was followed, children above 14 being treated as adults, and all able to do some work being allowed to work. Under the Public Works Department big children were those between 12 and 16, and small those between 10 and 12; under the Civil Department the respective ages were between 8 and 14 and under 8.

(V)

The payments to or allowances for children under 8 on works, whether workers or dependants, were not graduated according to their age or working capacity etc., as contemplated in the Code [sections 84 and 104(i)]. All above 8 got half the adult ration, and all under it one quarter, except children in arms, for whom one pice was given to the mothers.

(VI)

Residence in camp was not made "compulsory for all relief workers whose home is not within a reasonable distance from the works" as contemplated in section 78.

(VII)

Works under the Public Works Department were not regarded as confined to, or even as specially intended for, able-bodied labourers as contemplated in sections 54 and 89 of the Code, much less were A class labourers employed only on "large" works as contemplated in section 72. All works under both Departments were treated as for the relief of all classes of workers, no distinction being made in the task prescribed for diggers. Hence there was no regular drafting of able-bodied labourers under sections 72 to 75 of the Code, nor was it necessary therefore to have only one work confined to able-bodied labourers under the Public Works Department in each "Sub-division" (whatever this term may mean) as contemplated by section 89.

(VIII)

Relief works not under the Public Works Department, were not carried out under the auspices of the District

Mr. D. J. Board, as contemplated in the Code, except at the very beginning. They were carried out through Relief Superintendents under the direct orders of the District Officer.

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SECOND HEAD.

4. As regards the degree of success which attended our relief measures as a whole, with regard primarily to the relief of distress and saving of human life, I beg to state that no instance of death due to inadequacy in the measures of relief adopted was brought to light, in spite of strict instructions to the station and rural police to report, and at once specially investigate, every death alleged to be due to starvation. Further, the death-rate for the twelve months of the famine period (October 1896 to September 1897) was less than the average of the 5 years ending September 1895, being 34.6 against 36.2 per thousand. Under cholera there was a decrease in the death-rate of 2.94 per thousand, and under fevers of .09. Deaths attributed to bowel-complaints were the same as the average. On the other hand, there was an increase of '36 per thousand under small-pox, of '11 under injuries, and of '94 under "other causes." Eliminating the decrease under cholera—which, from its character this year, appears to have been due in no small part to special measures taken to keep the water-supply pure and prevent the spread of the disease—we may say that the mortality, on the whole, was not above the normal, except for an increase of less than 1 per thousand under general causes and some increase under small-pox. But, as the year was unusually free from fevers owing to its dryness until the period when famine was drawing to a close, there was no doubt, in addition to the increase not attributed to any particular cause, some mortality due to the impaired vitality of the people in resisting disease, and also owing to dysentery and the like brought on by eating unaccustomed, immature and unwholesome food. This is not shown under "bowel-complaints" as it should be, but probably accounts for the increase under "other causes," being so classed from the drowsy which usually accompanied it.

5. In the secondary matter of economy, the results of the general relief measures adopted were also, I submit, successful. The cost of wages paid to workers, and of doles, allowances and rations to all others, averaged only a little over an anna a head (to be exact 12.17 pies), as against nearly an anna and-a-half in 1874, in spite of the number of dependants supported by excess earnings of piece-workers not being included in the reckoning, though the cost of course is, and of prices of those grains with which comparison is possible being, for the whole period of famine, 50 per cent. higher than in 1874. Including relief granted through the medium of loans, the cost this year was nearly 5 lakhs of rupees less than in 1874. The numbers that may be regarded as relieved by loans in that year is not known; but through direct measures of relief 14,928,551 units more were relieved this time than in 1874. Of the total cost, on the most unfavourable view of the case, work was obtained in return worth at normal rates, nearly 7 lakhs of rupees, or nearly 60 per cent. of the expenditure on wages. If all charges, such as establishment and tools, be included, the average cost of relief was 15.7 pies per head; but under the Civil Department it was only 13.16 pies, and the latter would very probably have been nearly the general cost, everything included, but for the very high piece-work rate that had to be allowed on the main work under the Public Works Department—the Tribeni Canal in the north of Bettiah—on account of the high price of food and the necessity of fixing a rate that would enable the able-bodied workers to support their dependants at home.

6. (a) As regards the success, from the point of view of economy, of the special measures which constituted a departure from the Famine Code, I may remark generally that they were all introduced with the main object of securing economy in working, without at the same time denying relief to those who needed it. The modifications numbered (I), (II) and (V)—*s. e.*, in tasking, in the initial adoption of a form of piece-work, and in paying all children under 8 only the minimum for small children—directly conduced to this end. So also did modification No. III—piece-work pure and simple—although the average earning—2½ annas per adult male unit—was high. But this was because it had to cover also the support of depend-

ants at home, as the percentage of children on such work was only 17.6 as compared with an average of 21.07 for relief works generally, and that of men was 41.3 as compared with an average of 41.62. Full value, moreover, was obtained for all the work done, there being an excess of only ½ per cent. in the measurements, and indeed the average rate paid was somewhat lower than the normal rate for the part of the district where piece-work was almost entirely carried out. Piece-work, also, as introduced elsewhere towards the close of the famine, was directly conducive to economy, as payment was made for work actually done and at low rates.

- (b) Modification No. IV—the raising by the Public Works Department of the age for workers treated as children—also made for economy. Between the ages of 14 and 16 they got only the big children's wage instead of that of the adults, and the allowance paid to those under 10 as dependants was, on the whole, less than they would have got for the small amount of work they could have done.
- (c) The non-enforcement of the residence test on relief works (modification No. VI) caused a great saving in the expensive item of hutting, and also in conservancy and other arrangements. Not unlikely, however, it may have removed a check on the numbers resorting to works or on the hour at which they came on to them. I am convinced, however, that, in so far as it operated thus, it kept these additional numbers from getting reduced to such a state as to necessitate their being relieved gratuitously, or, at any rate, to prevent their giving a proper tale of work in return for their relief.
- (d) Modification No. VII—not confining Public Works Department works specially to the able-bodied—probably had no effect one way or the other. And its modification No. VIII—divorcing the District Board from the administration of relief—had any effect from this point of view, it must have operated in the direction of economy.

7. From the primary point of view of relieving distress and saving life, the modifications in the Code system, though introduced mainly to secure economy, in no way impaired the success of the general measures of relief indicated by the facts noted above in regard to mortality. The objection to piece-work (modification No. III) that if the rate is fixed low enough to prevent the better workers earning too much, it will prevent the weakly earning enough for their subsistence, was overcome by the plan of opening separate sections at privileged rates for the latter. The high task and severe fining adopted on task-work (modification No. I), in spite of the penal wage being insufficient to sustain life for any length of time, did not have the effect of preventing those in distress from obtaining adequate relief. Those fit to work could earn enough if they chose, while the weakly gangs were not fined in the rigorous way, and their task was eased by allowing an excess of carriers. In practice, indeed, considerable leniency was shown in working the modifications referred to, as measurements were not precisely taken. The Code system of tasking and fining, with a minimum wage sufficient for subsistence when there is no contumacious refusal to work, seems indeed designed to meet a state of things that did not occur in Champaran or, I believe, in Behar generally—namely, when the physique of the people has run down greatly owing to full relief measures not being adopted early enough.

As regards the other modifications, there was nothing tending to impair the adequacy of relief: on the contrary, modifications (VI) and (VII) might be expected to have the opposite tendency.

THIRD HEAD.

8. As regards measures and methods of working likely to prove most effective in relieving distress and saving life on the one hand, and in economy on the other, I do not presume that recommendations on matters of mere detail, such as the task and formulae for determining it, or forms of statistical statements or accounts, are required. I beg to put forward the following recommendations in regard to the general system and principles of working:—

I.

9. *Piece-work*.—In the forefront of all reforms, I beg to recommend strongly the general introduction of piece-work with a gradation of rates, keeping the works or sections to which each rate is applicable as far as possible, quite separate. The standard rate should be such as will enable a gang of ordinary cultivators or field labourers (*i.e.*, B class workers) to earn sufficient, by performing the ordinary famine labourer's task, not only for their own subsistence, but also for the support of their dependants who are unfit to do more than nominal work. As a rule all should begin at first on this rate.

Then there should be a separate section or work, on soft soil if possible, at a higher rate sufficient to enable the weakest people capable of excavating earth with a *koḍali* or carrying a basket of earth up an incline, to earn a subsistence, and in this case there need not be so great a margin as in the standard rate for the support of supposed dependants. If necessary there may be a section at an intermediate rate on to which the weakly may be drafted when apparently fit to earn more than is necessary at the higher rates. Experience shows that with the better feeding and regular muscular exertion, it was possible to introduce a systematic gradation of drafting from the most privileged to the standard rate. Then at the other end of the scale should be a section at a rate lower than the standard one, for all who might be found *in practice* on the standard rate section to be earning substantially more than that rate was calculated to allow. These would presumably be professional earth diggers. It is quite unnecessary to take account of their capacity for work with proper exertion and to task them accordingly; this would only tend to exhaust available work by inducing them always to do their best. It is sufficient to consider only what they really feel inclined to do in practice, and the grading can be done on inspection of at least a week's record of work and earnings. This grading, as well as the original admission to a particular section, should be done only by officers of the rank of *Change Superintendent of Relief* or *Assistant Engineer*, or superior to them. With piece-work generally introduced, and the concomitant curtailment of gratuitous relief, they would have time to do this. It may be said that in order to be placed on the privileged rate or to be kept there, people will not exert themselves so much as to make the labour test an adequate test of real want. But precisely the same difficulty arises in task-work when it comes to be a question of whether short work involving fining is due to weakness or to deliberate idleness, or of deciding whether extra carriers should be allowed, or the digging task reduced, and so on. And in these cases, the decision must not be left largely to subordinate officers who may be incapable of judging properly or prone to take advantage of the power given them to secure illicit gain. To begin with, the Relief Superintendent or Engineer would not put on the privileged rate any one who was not obviously in a reduced state of health, and thereafter it would not be difficult to ascertain his real capacity. The officers in charge could always watch whether individuals seemed to be making a genuine effort to do their best. With rates for piece-work carefully adjusted, there need be no fear of any one earning for more than a few days, much more than the State would be justified in expending on his relief. For the rest I am confident that there will, in the long run, be true economy to the State and advantage to the community generally, which must also conduce to the benefit of the State, in allowing relief workers to earn more than is necessary for the bare subsistence of themselves and their dependants. Without this, cultivation cannot be properly attended to, and in the event of unsatisfactory climatic conditions preventing the possibility of more than barely sufficient crops in the subsequent season, it is of the utmost importance to prevent a continuance of scarcity and relief measures, to encourage cultivation in every way. From this point of view it may even be advisable to relieve in this way people who are not in absolute present want, but who realise that they will have exhausted all their resources by the time the cultivation season comes round unless they do some thing beforehand to supplement them. Piece-work would enable them to do this as they would earn the full value of whatever they thought it enough to do. There is no fear of any but professional earth-diggers, in Champaran at any rate, undertaking earth-work on relief works unless really in want. In this connection I may be permitted to cite the result of the vast experience of the great railway contractor, Mr. Brassey, who found that "on the railways in India the great increase of pay which has taken place has neither augmented the rapidity of execution nor added to the

comfort of the labourer, the labourer desists from work as soon as he has provided for the necessities of the day; higher pay adds nothing to his comfort; it serves but to diminish his ordinary industry"—(Brassey's "Work and Wages," p. 88).

I may observe that to make piece-work a really adequate mode of famine relief, it is essential that the work should be separately measured and paid for in the case of every gang, however small, even if containing only one or two diggers. Under the large gang system the weaklings would be apt to suffer, and contractors might creep in. Payments should be made daily, except on Sunday.

II.

10. *Gratuitous Relief*.—With piece-work at liberal rates generally adopted, I think we might abolish village relief under Chapter V of the Code, unless in exceptional cases, and have only relief in the shape of cooked rations, *i.e.*, in poor-houses, kitchens and infirmaries. I take poor-houses to signify kitchens with the condition of compulsory residence attached. These poor-houses should be of two classes, for which distinct names might be devised, namely (1) those for waifs and strays, idiots and professional beggars; (2) those for persons eligible for gratuitous relief under section 42 of the Code who are of low castes or otherwise would have no particular scruples about accepting cooked food at a State kitchen.

I consider the condition of residence in the latter case necessary, as perhaps the main test of the reality of distress and of there being none to care for the recipients of relief; but after this has been demonstrated and the organisation is complete enough to ascertain the condition of the people in every village, the residence test might well be done away with. All new comers, however, should submit to it for sometime; even when residence has been dispensed with, people of the class referred to should come to these institutions or to additional ones that may be opened for them, the great object being to keep the relief of these people quite distinct from that of the more respectable classes. The latter, if eligible under section 42 of the Code, would be relieved at kitchens without the condition of compulsory residence, though rough sleeping accommodation should be attached for those who might choose to avail themselves of it on occasion. Then for invalids there should be hospitals or infirmaries attached to as many of the poor-houses and kitchens as possible. These should have wards for nursing mothers and pregnant women unable to attend relief works, residence in them being compulsory for women of this description. Relief, however, though cooked rations is expensive and liable to abuses, and if it should prove to be unsatisfactory as a general system of gratuitous relief, those eligible under section 42 might eventually be relieved by the system of weekly distribution of raw grain doles under Chapter V of the Code; but no one should be admitted to this form of relief without first submitting for a time to the test of accepting it in the form of cooked food at kitchens or at poor-houses of the second class. With the general adoption of piece-work, superior relief officers would have more time for systematic village inspection, and watching for indications of the proposed method on the one hand failing in adequacy, or on the other leading to too liberal a scale of relief.

As a suggestion, it might be found expedient to allow the wealthier members of the community to provide kitchens and infirmaries arranged on a plan they might consider suitable for the relief of the more respectable castes, on the understanding that they also met the cost of any additions to the general relief establishments thereby rendered necessary. The staff would, of course, be appointed by Government, and the relief, except in the shape of additional comforts, would also be at its expense, and the institutions administered entirely by it. But there should be visiting Committees appointed by the community establishing them.

There remains the case of high caste and *parda nashin* families, who would rather starve to death than accept relief at a public institution or in any public way. This is the class referred to in sec. 141 (2) of the Bengal Famine Code. Where a magnificent Charitable Fund has been collected by subscriptions from the public, as during the present famine, adequate relief to this class could be provided through its medium, but on the occurrence of local famines or scarcities this resource might be wanting in any case, also, I do not think that the whole of the relief granted to such families should be an absolutely free gift, nor would they themselves prefer that it should be so. I advocate, therefore, the relief of this class by a moderate grant of State loans,

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the recipients being selected with much discrimination. Such loans should be granted only on condition that all in one village who receive them, become jointly and severally responsible for them and hypothecate so much of their land as may be required to form ample security for repayment. So long as part of their relief takes this form, the rest may legitimately be left to the Charitable Relief Fund, where there is one. This system would preserve their self respect and obviate the demoralising effects of free charity. There is great danger, with a repetition of charitable relief, of a weakening of the sense of self respect which has so far prevented demoralising results.

III.

11. *Task-work.*—If piece-work, with a suitable gradation of rates, be introduced generally from the very beginning and in time, I do not believe that the people, especially after the lesson in self-reliance given them in the present famine, will ever allow themselves to get reduced to a state in which it would be necessary to abandon it in favour of task-work. But if its general application as the sole method of working relief works be not approved, I would allow task-work only at the period when the pressure of distress is greatest and throughout would keep piece-work going as an alternative. So far as task-work may be necessary, the system should be as simple as possible. Every additional element in classification only gives dishonest underlings an additional opportunity of obtaining part of the wage that is intended for the labourers. I cannot conceive of its being safe for the State, for the next generation or two at least, to ignore this fact in this country. Whatever possible loss to the State may arise from simplicity of arrangement would, I believe, be more than counterbalanced by eliminating the wrongful gains of the subordinate staff whether these be at the expense of the State or of the recipients of relief. To this end, I am in favour generally of the proposals described in Mr. Higham's Report on the management of Relief Works. Their main feature indeed—the abolition of all grade classification except into diggers, carriers and untasked workers (including special gangs)—is what we have worked in Champaran almost from the beginning, although we classified workers as A, B, C and D for the purpose of the statistical returns. This latter classification is unnecessary. Mr. Higham, however, goes further and would abolish all distinction between men and women, and would class children between 12 and 16 as carriers generally. In all this I agree. I also agree with him in thinking that no child under 7 should be allowed to work, and indeed I would propose that eight should be the lower limit of age. Without entering into details of the tasking, I recommend that the task should be fixed primarily on the diggers only, and that some simple standard should be adopted by which to regulate the proportion of carriers to diggers for varying conditions of lead, lift and soil, though to avoid constant changes in the working of the gang, I would allow some latitude on occasions. I would allow diggers and carriers to earn an extra wage under the conditions laid down in paragraph 16 of Mr. Higham's report. But I think a simpler method of attaining the same object could be devised by having a sufficiently liberal scale of wages to embrace the extra earning on a task proportioned to it, and abolishing altogether a minimum limit to the wage, whether in the shape of the minimum or the penal wage. The system would in fact be piece-work with a maximum limit to the earnings of the gang regulated by the number of diggers and carriers composing it. This would, I think, be simpler to work also than the system associated with Mr. Blackwood's name, as the work done in one day would be separately measured and paid for without the complication involved in doing this whenever the task set, if not completed within the day, happened to be finished. For really weakly persons a minimum wage might be paid under special arrangements, if experience proved this to be really necessary; but I do not think it would be with famine taken in time. Under either system I would make the extra earning or the scale of wages, as the case may be, sufficient to enable the Sunday wage to be abolished altogether. A Sunday wage should not be given to persons who have not worked for a reasonable number of days in the week, and this gives rise to difficulty and is not susceptible of ready check, and it opens the door to cheating by the underlings, not only of the State, but of the labourers. If a separate Sunday wage is allowed at all, I don't see why the coolies should not attend and work for it, so long as the measuring and payment for both Saturday and Sunday is done in the lump on Monday, and the staff would have no work to do on Sunday except to take the muster. Indeed Saturday's muster would suffice when the work of both days

is treated as a whole, and there is no minimum or penal wage. I beg to express a decided opinion in favour of having no gangs larger than 4 diggers with their complement of carriers. This was the rule in Champaran, and the system of larger gangs that was tried for a time by the Public Works Department, soon broke down.

With task-work it would be necessary to relieve dependants. It would be impossible to adjust the scale of wages so as to enable the worker to earn enough to support these, as it would only prove a greater inducement than ever for them to attempt to bring as many of the members of their families on to the work as possible.

IV.

12. *Place to be occupied by the Public Works Department in the scheme of relief.*

The Bengal Famine Code (section 22) says that the District Officer "will exercise general supervision over all works and arrangements for giving relief within his district, and will be responsible to Government for their efficiency;" and "officers of all Departments employed on famine duty within the limits of his district will take their orders from him on all points not strictly professional." This is a wise provision, as it is essential that the District Officer should have full control, subject only to the orders of the Commissioner and of Government, of all relief in his district, by whatever agency it be carried out. If this is not recognised in the case of any class of relief, he should fairly be divested of all responsibility for its adequacy and efficiency; but this would be establishing two independent authorities in a district of which one is the administrative head, and would inevitably result in disaster. At the same time, it is most desirable that the immediate supervision of relief works should, as far as possible, be entrusted to professional agency, i.e., officers of the Public and Military Works Departments. But these officers should be placed entirely under the orders of the District Officer when employed on famine duty. There seems no reason why officers of the Civil or Military Department of Public Works should not serve equally well under the District Officer, as regimental officers of the Staff Corps or British Army have done, some of the latter proving very satisfactory assistants. It would be different if the work to be done required a great deal of professional knowledge at every turn, but this is not the case with simple earth-work once the alignment is settled and working-plans approved, which should all be done long before there is any talk of famine. The difficulty really arises in the matter of the supervision to be exercised by the Superintending and Chief Engineers in professional matters. Such supervision and advice is very desirable, but it should not imply any departmental control over the executive officers. They might perhaps control the initial setting out of works, the opening of which on a particular system—piece-work or task-work—might be decided on by the Collector. But after that their action should be limited to advice and instruction on purely professional matters, the precise nature of which should be clearly defined in the Code. These instructions should be in writing and a copy of them, if not communicated through the Collector, should be sent promptly to the latter for his information, so that he may watch how far they may affect the adequacy of relief, e.g., in limiting the amount of work to be done and the accommodation for labour on it. Under this system I would make the Public Works officers responsible for poor-house and kitchen relief granted within a certain radius of their works. This would, it is hoped, have the incidental effect of overcoming the reluctance consciously or unconsciously evinced by some of them, or at any rate by their subordinates, to admit weaklings to their works. In this connection I beg to recommend that works under the Public Works Department and large works generally should not, as contemplated in the Bengal Code, be regarded as specially intended for able-bodied persons. If this were the case, the Public Works officers would continually be drafting off weaklings to the petty works under Civil officers, perhaps when there might be no room for them on these and in any case to the constant disturbance of the working arrangements on them. I ought to explain that all these remarks have special reference to the task-work system. If piece-work be made the general rule throughout and all village relief under Chapter V abolished, I should not object so much to relief works being placed directly under the Public Works Department, provided the Collector alone has power to determine the rates and how many grades of these shall be established, and has authority to prevent all arrangements that might have a tendency to convert the works into ordinary Public Works

on the petty contract system. Also the Collector and the Sub-divisional Officer should have full powers of inspection and the instructions of the former, and of the latter also when conveyed through him, should be followed with regard to the matters specified above and to the grading of the labourers according to their ascertained capacity.

V.

13. *Functions of the District Board.*—Section 54 of the Code contemplates that all relief works except "large projects, such as railways, canals, etc., especially sanctioned" and employing "only able-bodied labourers" should be carried out by the District Board; and section 18 indeed contemplates its administering also village, poor house and kitchen relief. The District Board should, however, be entirely divorced from any administrative connection with famine relief, unless on the occasion of small local scarcities. Test works approved by the District Officer might, however, be carried out by it on strict piece-work principles at rates to be prescribed by him.

VI.

14. *Distance Test.*—This is not provided for in the Bengal Famine Code. On the contrary, Section 55 (3) says that "relief works should be sufficiently numerous to supply labour tolerably near to the houses of those who require it". It is true that section 89 says that there should not be more than one relief work carried out by the Public Works Department in a "sub-division" (whatever area that may signify), but this refers only to works confined to able-bodied labourers, and does not imply the distance test at all. The only provision of the Code which could be interpreted as signifying this is that in sections 72 and 74, which contemplates able-bodied labourers, or at any rate all A class labourers, being drafted on to "large" works; but even in this case it is laid down in section 73 that "regard shall be had to the distance of such works from the worker's home". As I do not recommend the application of the distance tests in this province, it would be superfluous for me therefore to say anything here on the subject, but for the importance attached to it in the proposals of Mr. Higham. With an adequate earth-work labour test either in task-work or piece-work a distance test should be unnecessary. It is hardly needed in the case of cultivators or field labourers: these would not do earth-work unless really impelled thereto by want. The only class who will do earth-work, though not in real want, are professional earth diggers, but they will only do so if adequately remunerated. In their case, however, a distance test is unnecessary, as they have no scruples in going far for work on which they can earn enough to keep them going when suitable employment is not available. Of this class there are comparatively very few in Champaran, as most of them have land and they go far in search of employment only at the season when their cultivation does not claim their attention, that is, in the cold-weather months.

The only case in which there would seem to be any necessity for a distance test, would be when too great leniency is shown in granting a wage with a minimum limit for however small a quantity of work done. But, as already stated, I would abolish this system altogether, unless in exceptional cases of weaklings. Even if the penal wage be adhered to as a minimum, I think it can be worked in such a way as to render it unnecessary to impose also a distance test to keep off the work all not really in want. If it is found to attract able-bodied persons from the vicinity who make no genuine effort to accomplish the task, the penal wage can be given in the shape of cooked food, and if this has no effect they can be turned off the work altogether. If their contumacy is manifestly resulting in their running down in physique, the remedy is to send them to a poor-house. But not only do I believe a distance test unnecessary with other arrangements that seem to me quite feasible, but I feel convinced that in this Province it could not be worked at all as a general system without running counter to the primary declared aim of Government, the relief of distress and the saving of human life. Men of the more respectable castes may indeed go a distance for work, but nothing short of the verge of absolute starvation for their whole family, and perhaps not even that, will induce them to take their women folk so far as to necessitate their residing in a relief camp. Eventually, as I say, they might come a distance, but they would be in so reduced a condition that they could do no work worth the name, and might as well be placed at once on gratuitous relief. This would counterbalance any saving to the State of any relief

obtainable by people not in real distress coming to work simply because it can be got near by, and I believe that if the Government were to persist in holding out for the test to the last, it would, with the influences now at work in India, and out of it, constitute a real political danger, and at any rate debar the Government from reaping the advantage of credit such as it has undoubtedly got for its administration of the recent famine. In the two northern Thanas of Bettiah, it is true, people had to go long distances to get work as all relief works were practically closed within 12 miles of the Tribeni Canal; but in that tract there are hardly any high caste people of a position likely to throw them on to State relief.

But, apart from all this, I believe that the enforcement of the distance test in a country so entirely dependent on agriculture as North Behar, would be apt to aggravate and perpetuate the disadvantages of the situation. In dealing with piece-work, I have already pointed out that under certain climatic conditions there might be great risk of a continuance of scarcity, if not of real famine, if every possible effort was not put forth to cultivate the lands. This might be frustrated if the distance test was largely in vogue, but I understand that it is not advocated for the rainy season. For a considerable time before that comes on, however, every shower in April and May is taken advantage of to prepare the land for an early crop. It is characteristic of these showers coming as they do in thunder storms, that they are sporadic in extent, and cultivators on the work could never tell when rain might fall on their fields. The greater part of the rainy season itself in Champaran this year was of this fitful and sporadic character, and it was, I believe, owing to the general adoption of piece-work in the northern portion of Bettiah, and the existence of works near the cultivators' homes in the rest of the district, that cultivation did not suffer greatly. In no case, even where people will freely come and reside in a relief camp, do I think works should be so far apart as to take the people more than 12 or 15 miles from their cultivation, unless at a season when this needs no attention. At any rate where the task system is in force, the great advantage of piece-work at liberal rates would be that it would enable the people to earn enough to go off to their cultivation when necessary and to provide, literally, for "a rainy day". Notwithstanding all I have said, I think many petty works had better be avoided in the earliest stages.

The compulsory residence in camp for those who come more than a certain distance prescribed in section 73 of the Bengal Code, is not, I take it, intended as any test of distress; but simply to keep the people from becoming a nuisance to the neighbourhood, or from taking up too much of their time in going to and fro at the expense of the work and gradually losing strength through consequent short wages.

VII.

15. *Utilisation of village agency.*—It would be a great help in the administration of village relief, if members of the Panchayat, headmen, village-accountants and chowkidars were by law declared to be bound to furnish correct information, when called for, bearing on the eligibility of persons in their villages for gratuitous relief.

VIII.

16. *Scale of wages or doles.*—The allowance under section 44 of the Code for those on gratuitous relief, and also the minimum ration as fixed under section 103 for D class labourers, which is also the scale adopted in poor houses and kitchens, though sufficient to sustain life, is not enough to enable the weakly to gain strength that will render them fit for work. The only way they improved at all was when they could be sent to earn piece-work wages at a rate specially fixed to meet their case.

On the other hand, the margin allowed when the wage is fixed on the grain equivalent system, under section 104, is so liberal as to violate the principle of a bare subsistence wage, and it is not apparent why no such margin is allowed when the wage is fixed under section 103. At the same time I believe in this liberal margin, so long as it is not made a minimum wage which people must be paid whatever the amount of work done, as it enables the workers to support some one at home to look after the house and cattle and, to a certain extent, to admit of themselves leaving on occasion to attend to their cultivation.

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IX.

17. *Coin to be used in paying wages.*—Government copper coin is not current in Champaran, but had to be used in paying wages. Do what we could, the coolies had, however, to change it into dumpy pice at a discount before they could purchase provisions in the bazar, or, if accepted direct, to suffer loss somehow. We did all we could during the famine to supplant these dumpy pice by standard coin, but the *dunniahs* were too strong for us. I would strongly recommend that the legislature should make the possession and use of such dumpy pice illegal. If this is not done, it will be advisable in another famine to use such coin where small silver will not suffice.

X.

18. *Subsidiary recommendations not affecting questions of principle.*—I may note here the following, among many minor points of detail, that would, I consider, lead to improvement in the methods of working :—

- (1) As far as possible, non-commissioned officers and specially selected men of the British Army in India, and Native officers of the Indian Army, or the Reserve, should be employed as "officers-in-charge" of relief works from the very beginning, and a certain number of these should come down to be trained at least a couple of weeks before there is any chance of relief works having to be opened. They should, as far as possible, be volunteers and know a little of the language. Native officers also make excellent inspectors of kitchens. The Code (section 59) says "officer-in-charge" on Public Works relief works shall be subject to the control of the civil authorities. I think that they should in no way be less subject to the control of Public Works officers responsible for relief works than any other of their subordinates. During the recent famine we made them entirely subordinate to the latter.
- (2) Provision should be made in Chapter IV of the Code for the appointment and duties of Circle officers for smaller areas than Thanas, say of from 40 to 50 square miles, who would be subordinate to the officers described in that chapter, the latter being designated Relief Superintendents, and the areas under them Relief Charges.
- (3) Relief Superintendents should not be officers, whatever department of the public service they are drawn from, of less than two or three years' standing. It is easier for officers junior to them to replace them in their departmental duties than to carry out famine work satisfactorily.
- (4) Special arrangements should be made to have plans and estimates made by the Public Works Department, long before there is any talk of famine, of all "large" relief works in the standing programme except tanks.
- (5) Accounts, working forms and returns should be precisely the same on all relief works, by whatever agency managed. During the recent famine there was a great difference in this respect between the Civil and Public Works Departments.
- (6) District Officers should be saved the labour of preparing the elaborate mid-monthly reports and statements prescribed in sections 24 and 26 of the Bengal Code. It should suffice to send in statistical statements with a few explanatory notes at the foot. These statements should, however, be carefully compiled and give all information that may be required for the final report, and sufficient time should be allowed for them to be accurately and completely compiled and for the District Officer to obtain revised figures in case of any apparent errors. The periods should not be by weeks at all, but from the 1st to the 15th, and from the 16th to the end of each calendar month. With the returns for the latter period should be submitted a report on the operations of the month similar to that now sent in. All accounts and detailed bills

should be exactly for the same periods, and sufficient time should be allowed before the actual submission of the returns for all payments for wages and doles, for the period covered by them, to be made.

At the same time the weekly statement of the bare numbers on each kind of relief, prescribed in section 23, should be sent promptly for publication in the Gazette, and should, if possible, cover a uniform period everywhere. At the initial stage, until famine is declared to prevail, weekly reports on the aspect of affairs should be submitted by the District Officer.

FOURTH HEAD.

19. It does not occur to me to mention on the present occasion any other recommendations or opinions likely to be useful in case of future famines, except to advocate strongly the extension of irrigation as much as possible. I believe that in those portions of Champaran where famine is always felt most severely, owing to the disastrous effect of a failure of the rice crops, projects can be put forward, some of which were begun as relief works during the present famine, that would have the effect of protecting the crops from such failure as should entail famine. I have in paragraphs 74 and 105 and 106 of my final famine report mentioned such projects of the kind as suggested themselves to myself or others during the recent famine or shortly before it commenced, and there are many minor streams from which small irrigation projects could no doubt be carried out. Under this head I should have advocated a survey for the purpose of obtaining accurate agricultural statistics, but this has already been completed for Champaran.

Answers to Questions of the Famine Commission recorded by Mr. D. J. Macpherson, C. I. E., Magistrate and Collector of Champaran, Bengal.

*1. Three thousand and sixty seven square miles, with a population probably of about 1,950,000.

2. Local failure of rains and crops, both in 1895 and in 1896, intensified by abnormally high prices due to similar causes operating elsewhere in India.

3. (a) Rainfall 33.3 per cent. in defect. *Bhadai* and *aghani* harvests of 1896, 47½ and 54 per cent., respectively, below normal, and *rabi* harvest of 1897, 40 per cent. below it.

(b) For the whole 12 months, from October 1896 to September 1897, the mean price of the principal staples was 75½ per cent. above the average of the preceding 5 years. For comparison with previous famines, see answer to question 8.

4. The *bhadai* food-crop harvest of 1895 was about 17 per cent. below the average and the winter rice about 21 per cent.; and the *rabi* harvest of 1896 was deficient by about 37 per cent. The condition of the affected area when famine came on was, therefore, far from good, and to this, as contrasted with previous famines, the people generally attribute the intensity of the present famine.

5. The Champaran peasant is, I consider from experience of several Behar districts, worse off than any other in Behar. He is inert and inefficient, and the prevalence of malaria saps his energies. He does not usually irrigate his lands. He is thriftless and greatly indebted.

The following sections of the population seem to me to be in an unsatisfactory and precarious condition :—

(1) The landless labourers, and especially the *Nunias* who, since the damage done to the salt-petre industry, are largely dependent on employment on earth-work, which ceases in times of scarcity; and,

(2) The cultivator who has been sold up by his *malajan* and is now only a sub-tenant under the latter.

6. Yes. There is little irrigation even where the people admit the soil to be well adapted for it; and in light loam soils they will not take to irrigation, asserting that if they once do so, the soil loses its retentiveness of moisture thereafter. Rice, which is specially dependent on rainfall, forms 54 per cent. of the food production of the district.

7. Champaran has very few petty landlords or substantial raiyats as compared with the rest of Behar. The district is practically owned by a few large landlords, including the Bettiah Raj. The cultivating class are so much indebted—

* The numbers refer to the questions drawn up by the Commission.

three times more so than in the adjoining District of Mazafpur—that the *mahajan* has the first claim on their crops. I do not believe that in ordinary years more than about 2½ months' food-supply of the whole population exists in the district. This was also the estimate of Sir A. P. MacDonnell in 1876, when the population was much smaller. It is the same with money as with crops, I should say. The smaller cultivators, the landless labourers and the artisan class have no reserves to fall back upon that would keep them going for more than a very short time indeed. Speaking very roughly, and without having considered the question in detail, I should say that at least one-third of the population would be without such reserves and would be entirely dependent on help from Government or their landlords and *mahajans* in time of famine.

8. The failure of the crops in 1896-97 alone was considerably greater than in 1873-74 and much greater than in 1865-66, and the year was preceded by poor harvests, as 1865-66 was, whereas the famine of 1874 came on the top of good years. Prices for the 12 months from October to September were 5 per cent. higher than in 1865-66, when supplies completely ran short for a time, and 50 per cent. higher than in 1873-74. I may mention that the people lay stress on the fact that the mango crop was a great stand-by in 1866, whereas it was practically a complete failure this year. The present famine, both in extent and severity, was the most grievous the district appears to have experienced in modern times.

9. There was neither under-estimate nor over-estimate to such an extent as to affect the character or amount of relief provided. The estimate based on the forecast advanced by me before the famine ever began was only 3½ per cent. under the mark, and it anticipated the course of events pretty closely throughout. I did not foresee, however, the long duration of a high level of prices that ensued, and this will explain the under-estimate.

10 and 11. The recent famine was probably as bad as Champaran might ever expect to suffer. The highest percentage on relief at the worst period (second week of June) was 11·77. For a period of 3 to 4 months at the worst time it may be said to have been about 10½ per cent. on the population affected for the time-being. It would have been much higher had relief not been given on much stricter principles than in 1874. I hesitate to give an opinion as to the propriety of the limit laid down by the Famine Commission as my experience of famine is confined to Champaran and to a famine lasting for one year only.

12. Hardly, I think, at the time of greatest pressure. At first, when we were rushed and before we settled down to a definite system of working that we were in a position to enforce the provisions of the Code with reference to the minimum wage, and the hesitation shown by inexperienced officers in turning away people who seemed content to earn the penal wage for doing next to nothing, lest they should run down in physique, no doubt resulted in relief being given for a time to people who did not absolutely need it; but eventually they had all to be relieved.

13. We might, I think, have done more for the relief of the respectable classes referred to in section 141, clause (2) of the Bengal Code; but this was the fault of the people themselves in not availing themselves of relief under the conditions necessary as a test of distress. I have in my general evidence indicated how these classes can best be dealt with.

14. They were in my opinion adequate for the relief of real distress if people chose to accept the situation.

15. Discussed in my general evidence. Relief was undoubtedly successful.

16. There were no sudden marked fluctuations in numbers due to any change of system. There was some decrease as works were being brought under efficient control and idlers made to realise they must work to earn even the penal wage; but an increase speedily followed as distress was deepening at the time. The completion of the inquiries preliminary to bringing people on to village relief resulted in sudden increases; but this was not a consequence of any change in the scheme of relief; similarly the substitution of kitchen for village relief resulted in a decrease; but this was when such might be expected in any case, as it was late in the season.

17. No. The death-rate indeed rose about the time when village relief was largely abandoned in favour of kitchen relief, but this was, I think, due to the usual climatic causes at work at that season operating on a population whose vitality had been impaired by privation, and to illness brought on by eating immature, unaccustomed and unwholesome articles of food.

18. Yes, so far as the Code system with a penal wage as a minimum limit would allow.

19. Yes. But a certain number, I think, by persistent refusal to work, brought themselves into so reduced a condition that eventually they became unable to work, and had to be put on gratuitous relief.

20. Yes.

21. I think the Famine Commission must have ignored the fact that on the ground of age alone the number who could not work would, according to the results of the census, be about two-thirds the number of the workers, *i.e.*, reckoning for Champaran, children under 10, women over 45 and men over 50, as unfit to labour. No doubt older people may do a fair amount of work, but this may be set against the numbers incapacitated on other grounds than age. Indeed I do not think there is any necessary connection between the numbers incapable of working and in need of relief, and those who are able to work in order to obtain food in times of famine. This percentage, relieved otherwise than through the operation of the labour test, was 2·42 on the population affected, and equivalent to three-fourths of the number relieved on works.

22. I decidedly think so as regards the task: the matter is fully discussed in paragraphs 112 and 116 of my Final Famine Report. The wage actually paid was a bare subsistence one, as shown in paragraphs 121 and 122 of that Report.

23. What the Bengal Famine Code says (section 89) is that as a general rule, there should be only one work under the Public Works Department *i.e.*, (See section 54) a canal or railway or the like, in a sub-division, and that only able-bodied labourers should be employed on it. We did not have any works confined to able-bodied labourers, and therefore only one large work, even if any useful project large enough could be devised, was not necessary. It is not known precisely what a "sub-division" signifies. Champaran, for instance, though having an area of 3,531 square miles, has only two civil sub-divisions (one being the head-quarters one); a district in the North-Western Provinces has, on the average, only half its population, and yet has, it is understood, several *tahsils* or sub-divisions. "Large" works, *i.e.*, works capable of accommodating 3,000 people for a month, were more numerous than indicated in the question, and the workers did not, as a rule, reside on them. Such residence is disliked, and would be an effective and fair test of necessity, but only if combined with a labour-test.

24. 6·83 per cent.

25. In 1874 the average for the whole month of May for the whole population of the district as ascertained in 1872 was 11·08 per cent.

26. By no means with greater eagerness as compared with 1874, though distress was much more severe than then. They came earlier than then, mainly because the food-supplies, owing to a succession of poor harvests with a greater failure of the crops of the year than then, became exhausted much earlier and prices speedily rose to a much higher level. To a certain extent there were rushes in the early stages which it was difficult to control owing to the provisions of the Code, with reference to the minimum wage and the inadequacy of the staff. As for 1866, there was practically no state relief at all.

27. Principally in the form of grain doles distributed at relief centres, except in the latter stage when kitchen relief almost entirely supplemented this.

28. This is a matter not easily answered briefly. I have in paragraph 128 of my Final Famine Report indicated the extent to which the distribution may have been somewhat too free. Several high officers of Government inspected those on village relief at different times and saw none who should not be on it. On the whole, I think, the risk is as great on relief works if attempted to be conducted on the full Code system of a gradation of tasks, with a minimum wage, as it was on gratuitous relief with the agency we had at our command to look after it.

29. Yes, but not if account be taken of the extent to which relief was granted through the medium of loans in 1874. Both included, we spent ₹9,14,584 on relief otherwise than through the labour-test, while in 1874, ₹13,40,398 was so spent. I believe the extent to which gratuitous relief was resorted to has been beneficial in preventing those incapable of working from wandering or incommencing the relief works, and, considering the class of people relieved, I do not think it has been demoralising to any extent. We did not begin village relief generally so early or continue it so late as to weaken the moral obligation of mutual assistance.

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30. Gross expenditure on relief Rs24,87,976. Units relieved 31,706,051 at 15.7 pies per head. Comparison with 1874 cannot be made completely as only expenditure on wages and doles is known, and even the former excludes relief given on a very large work, the Ganduk Embankment. So far as it goes, about Rs16,05,514 was spent in 1874 on wages, and doles to 17,377,550 units or 17½ pies per head, against Rs20,10,331 on 31,706,051 units or 12½ pies per head, in 1897. (Further details are given in para. 153 of my Final Report.)

31. Loans to agriculturists for seed and temporary wells Rs2,64,826. No suspensions or remissions of Land Revenue. In 1874 the loans in cash or grain aggregated about 11½ lakhs.

32. I do not think any class, as a whole, has been permanently injured as a consequence of the famine. The increased mortgaging and sale of holdings must, as things go in Champaran, result in a considerable number of the smaller cultivators losing their estates and becoming either subtenants or daily labourers.

33. I think not, if Section 141 (2) of the Code be held to authorize a free admission of persons of respectable position and family to gratuitous relief. But they would be most reluctant to accept it, and I do not approve of the principle, and would prefer loans to this class as advocated in my general evidence.

34. They are sufficient for all practical purposes so far as the means at our command will admit.

35. By general enquiry as to comparison with the previous year and ordinary years in both respects by Revenue Officers of all grades, from the Collector to the Kanungos, when on tour, and by special enquiries by Deputy and Sub-Deputy Collectors and Kanungos where the forecasts have to be prepared.

36. Fairly well, I think, now that we have this year in Champaran obtained the results of the Cadastral Survey. But these were not available until we were half through the famine. The planting community are able to furnish fairly accurate information as regards the condition of the crops.

37. Yes.

38. Not largely. I relied more on special enquiries made into the extent of the failure of the crops of the current and past years, and the stocks in hand when famine became a certainty and before relief measures were actually necessary.

For information on the points raised in questions 39 to 49, see my general evidence. The only points not embraced in these are the following:—

39. There was very little private relief in Champaran except in the shape of relief works by indigo concerns in November, December and part of January; a large kitchen at Bettiah for 7 weeks in January and February, and a small one throughout at one indigo concern. There was also some distribution of grain doles in the town of Motihari by the Theosophical Society before the Charitable Relief Funds was started.

40. As District Officer, I was throughout the whole period of the famine responsible for all relief given in the District of Champaran.

(3) (A) After relief works on the task system were brought into proper control, relief works on the piece-work system, and village relief.

(B). The same and kitchens. The task-work system under which labourers cannot earn enough to enable them to go off and attend to their cultivation when necessary, and poor-houses if intended for any but beggars, were decidedly condemned by intelligent native opinion.

53. We constructed very few new roads. One or two would require to be bridged to be of permanent service; but the earth-work can be maintained and proper approaches made to waterways until this is done.

54. There is a good deal of room for new roads in Champaran, about 180 miles; besides a series of feeder roads when the railway is extended from Bettiah to Bagaha.

55. I have no experience of this, but had we not had the Tribeni Canal to suffice for all requirements, I had contemplated it as useful work in North Bettiah in the rains for railway ballast.

56. None collected at all.

57. (i) Most useful, mainly because they give scope for employing all unfit to dig owing to long lead, and because the work is stationary.

(ii) There was much want of such tanks in many parts of Champaran for irrigation and providing water for cattle

and a great many tanks had lost much of their utility in this respect until we re-excavated them. The matter is discussed in paragraph 109 of my final report.

59. I should say about 2,000. I see no reason why we should not be able to supervise strictly a large number of these works if the Army be freely drawn upon for Non-Commissioned Officers and specially selected men as "officers in charge." It is a mistake to regard these works as "small": ordinarily they are nearly as large as would form a separate working section of a large project, and supervision is easier than in the latter case owing to the generally moving character of the work. It will be all the easier with the adoption of piece-work, I advocate. The last part of the question refers to the distance test discussed in my general evidence. I consider it possible to have an adequate test, without making people go a distance. (See paragraph 108 of my final report.)

60. Very far from it.

61. None constructed in Champaran as the slope of the country was not considered strong enough.

63. I should have liked to have seen such constructed in Champaran, as they are the saving of the district of Gaya, with which I am acquainted. But from what the District Engineer said as to the slope of the country, I fear the impounded water would take up far too much space (see paragraphs 74 and 105 of my final report). They were the very first works I thought of as most useful for relief and beneficial to the district.

67. I have mentioned some in paragraphs 105 and 106 of my final report. Mr. Buckley, Superintending Engineer, Sone Circle, examined some others, but mostly of a petty nature so far as their utility as relief works is concerned.

70. See Sections 5 ("Form 3") and 7 of the Famine Code. Having regard to the provisions of the Code in paragraphs (2) and (3) of section 55 and in sections 64 and 7 (see discussion in paragraph 104 of my final report), and the want of necessity for preparing beforehand plans and estimates of tanks, I consider that the provisions of the Code were substantially observed. The programme provided enough work. But there was room for some large projects that might have been investigated and planned beforehand by professional agency had the Province a staff to spare for the purpose; and the programme itself was not very intelligently prepared. The main project, the Tribeni Canal, had been examined in connection with the famine of 1874, and plans and estimates for a high level canal prepared, but the work was not sanctioned. In the programme, therefore, the work figured as one to be done only on a very small scale, costing about Rs21,000.

71 (a). About 4 to 5 miles: but I have known people coming 8 miles for a time;

(b) Any distance within a district if Government persists in holding out for the distance test long enough, but the people would get reduced to a state unfitting them for work.

72. Yes: but eventually they would become so reduced physically as to fit them only for gratuitous relief.

73. No, considering the very large proportion of people on our works in Champaran who had cultivation and cattle to look after, or were agricultural labourers.

74. The exception. In the vicinity of the Tribeni Canal, however, there were no other relief works within a distance of about a dozen miles.

75. No.

76, 77 and 77 (A). This matter is discussed in my general evidence and also in paragraph 108 of my final report. I noticed a distinct deterioration in physique on one occasion after the numbers on a large work resorted to by many from the vicinity were greatly limited by the Executive Engineer, although there were other works only 4 or 5 miles off, but this was remedied in time. I am convinced high caste people will never bring their women folk to works, so far off that they must reside there, until they are reduced to a condition rendering them unfit for work.

78. I cannot answer as regards professional supervision. Other staff with help from the Army, would, I think, be sufficient.

79. No.

80. Roughly speaking, about a rupee a head or a little less, i.e., taking account only of those who need it.

81. No, but there was very little residence on them till the cold weather was over.

82. No.

83. This cannot be stated in the case of Champaran, as the policy was deliberately adopted of drafting dependants as far as possible on to village relief.

Section III, questions 84 to 113.—I have already in my general evidence discussed most of the questions raised here, and subjoin only remarks on such points as are not covered by them:—

84. A little over 8 per cent. on piece-work, and under 92 per cent. on task-work.

90. I should leave it to the workers themselves, and pay separately to every gang so formed, however small. But as a rule, the gang should be limited to about 10 to prevent the headman becoming a sort of petty contractor and intercepting a certain percentage of the other labourers' remuneration.

91. (1) Not if the gangs are formed and limited as above.

(2) We adopted this system on piece-work, and there were no complaints. There were large gangs of 60 to 100 for a couple of weeks or so, when relief works were started under the Public Works Department, and then complaints were numerous, and the system had to be abandoned.

92. On piece-work one "officer in charge" could deal with 4,000 or 5,000 workers and one Sub-Overseer with 1,500 or 2,000 for measuring up. One Overseer could do the check measurements on three or four such charges. The whole staff of Mohurrirs for writing nominal muster-rolls could be abolished. Under the task-work system, I think, an officer in charge and Sub-Overseer could not deal properly with more than about 2,000 labourers.

95. On the whole, I think the wages proposed by Mr. Higham appropriate, namely 21 chittacks for the special class; 19 for diggers; 13 for carriers (including children from 12 to 16); and 8 for working children under 12. I am in favor of as much simplification as possible.

96. No. (See my general evidence.)

99. I think the system we adopted in Champaran sufficient. We fixed double in proportion to the deficiency in work done (see my general evidence) down to the penal wage in the case of people apparently strong enough to do the task set; and turned off the work all able-bodied persons who, from observation of 2 or 3 days' working, seemed content to earn the penal wage without making any genuine effort to do work sufficient to earn it. But they were allowed to come back after 2 to 3 days and make a fresh start. If this had no effect, they were to be given the penal ration in the shape of cooked food, but the staff did not manage to arrange for this. As a last resort, if their contumacy should be observed to be obviously telling on their physique substantially, they should be sent to a poor-house; but they would not go there at all.

101. Yes: carriers for the most part only got this. It did not tell on their health, but the weakly cannot improve on it. When fixed on the grain equivalent system under section 104—the only one we tried—there is a liberal margin above the minimum ration (see para. 122 of my Famine Report).

105. The formula seems simple enough; but it should not be put into the hands of the relief works staff to apply, but simple tables of the standard proportion of carriers to diggers based on it for varying conditions of lead, lift, and soil should be prepared.

106. My experience does not enable me to say; but this much I know, that carrying was felt by the labourers to be more irksome than digging, and the duty should therefore be light enough to enable the carriers to take some rest.

107. Not always the best proportion, but near enough for all practical purposes; but with much trouble.

In Champaran as excavation got below a certain depth, we used to adjust the matter by converting a digger into a carrier.

108.* I should not make it more than 4 diggers with the complement of carriers necessary for working the initial unit of lift.

109. I did not try it, as pure piece-work was sanctioned about the time it was proposed for our principal works, and in any case, I preferred a system by which measurements would not have to be made for work done during a portion of the day only (see my general evidence).

112. 41·62 per cent.

Variations all discussed in paragraph 101 of my Famine Report, the maximum and minimum limits being 51·4 and

84·36. On piece-work the proportion of men was considerably above the average.

113. The percentage of women and of children (*i. e.*, reckoning the latter as under 15) according to the census of Champaran is 69·5 of the whole population, and of men 30·5. As the women and children actually formed only 58·4 per cent. but the men 41·6 per cent., there was no unreasonable excess of the former.

113. (A) (f) Yes, on the assumption stated of high prices and an expectation of famine. The works in question would in a way become test-works, as the rates paid would be the ordinary ones, while prices would have risen greatly.

(2) With the piece-work system, which I advocate, I do not see why there should be any difference between such employment and employments on regular relief works as would affect the independence of the labourers. It would enable them to retain their full working power longer if it be assumed relief works are not to be opened till the people begin to get reduced. I do not think it would stave off the time when private charity and mutual help cease.

113. (B) I think so, but it would not be necessary to continue this until the people are completely restored to their normal condition.

113. (D.) My opinion is that employment to inefficient labour may be afforded by extending work on the piece-work system at differential rates without resorting to task-work or the intermediate or gang piece-work system. That being so, I consider that the whole of the principles referred to should be revised.

Section IV, questions 114—120.—All this is discussed in my general evidence.

121. No; unless circumstances actually arose to render it really necessary to prevent disturbances.

122. No; not after the abolition on works under the Public Works Department of the large-gang system and of the system of setting the task according to the number of persons of all classes in the gang under the Task-Tables prepared by the Chief Engineer (see paragraph 89 of my Famine Report.)

123. Some might; but we were the victims of circumstances owing to the comparatively late stage at which the Public Works Department come fully into the field, chiefly because of the difficulty of getting an adequate professional staff together. The matter is discussed in paragraphs 88 and 93 of my Famine Report.

128. These are found only in the extreme north of Bettiah. These Tharus came at first a whole village together, but ultimately, when rain came, the men went to their fields, and the women continued to work by themselves, a thing quite unprecedented among them, though they have before sometimes suffered more than other classes from scarcity. All this was on piece-work.

129. On piece-work 4,000; on task-work, 2,000.

130. It is best to relieve non-working children of labourers in kitchens at the relief works, but where they are not numerous money allowances may be given their parents to avoid the trouble of cooking food. It will be easy enough to watch whether the children are getting the full benefit of these allowances. Generally speaking, they would be fed on the spot in any case.

Section IV (A), questions 133—136.

No complaint was made by anybody, but I heard that there was some difficulty in getting enough professional earth-workers at one time for a piece of work on the Segauli-Ruksaul Railway, and the matter was fully inquired into. It was demonstrated that the Government relief works were in no way responsible for this; but that the rate was inadequate, the lead being very long, about 300 feet and over a fence. On the rest of this railway under a different contractor, no such difficulty was experienced, and I was never asked for labour for it, although, at the commencement of relief operations, I offered to draft able-bodied workers systematically. This railway, I ought to mention, ran through part of the district where relief works were not considered necessary. Planters, so far from complaining, were only too glad to see employment provided for their tenants.

137. Even with piece-work at identical rates it is probable relief works would be the more attractive, as greater care is taken to see the actual labourers fairly dealt with and regularly paid; but if there were any complaints, and the private work was suitable for relief, I think Government might offer to take it over, and hand it back at the rate that ought to be paid with due regard to the divergence of prices from the normal.

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Mr. D. J. Macpherson. 138. Certainly, by most indigo concerns, especially in the early stages (see paragraphs 75, 86, 162 and 163 of my Famine Report).

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139. I think private agency was employed as fully as possible in the manner described in the paragraphs quoted, account being taken of the unsatisfactory financial resources of the Bettiah Raj, and of there being comparatively few people in Champaran of a class substantial enough to take loans for village works.

148. 5-21 per cent. (including dependants) *i.e.*, in third week of June (about the time of Mr. Higham's visit to the district, when he stated that he saw none on such relief who seemed fit to work).

149. Yes.

150. See answer to question 28.

151. By private charity or relatives. Relatives and the charitable public became unable to support others in famine times, and on the theory of a bare subsistence wage underlying the Code system of work, the State must support dependants, *i. e.*, perhaps two-thirds of the number that are able to submit to the labour test (see answer to question 21), or they would die.

152. Yes, about 80 per cent., or more. There were very few *parda nashin* people, except before the Charitable Relief Fund came into full operation.

153. (1) For Champaran, I should say about $4\frac{1}{2}$ per cent. during the month or two of severest pressure, but it is difficult to form any reliable estimate. (2) Yes, as different strata of the population became hard-pressed and have to come on relief or cease giving charity.

154. I don't think there is any necessary connection between the two, as many disturbing circumstances have to be taken into account, as experience in other districts of the Province, though not in Champaran, shows.

155. It is not, I think, necessary. The able-bodied relatives, if on relief, would not be able to support them in any case.

156. We should have to relieve the incapable person in any case, assuming the able-bodied relative to be himself in such want that he *ought* to go to a relief work (on the task system), but I would do so only if he went to a poor-house of some kind, and showed signs of becoming reduced.

157. It is very popular. It is also sought for, as suggested, but many will refuse it out of a sense of pride, preferring to *earn* support by working.

158. Yes: but it might have been better had we had native officers of the Indian Army at our disposal for the purpose from the beginning.

159. Quite the reverse.

160. No: but see answer to question 157. There was some social, but not caste, stigma attaching to it in some places, but there was no valid ground for this.

161. It depends on when it is started on a large scale. In Champaran our relief works were crowded before we organised them fully, and private charity had dried up of itself by then. So also we abandoned village relief and substituted the kitchen system by the time it might have been expected to begin to flow again.

162. See answer to question 28.

163. No.

164. See my general evidence. I am in favour of making the acceptance of cooked food at least an *initial* test of eligibility for the receipt of village relief in all cases.

165. As a rule people who have some position in their society, and have children to marry off, will not go to these. Instances are known of respectable castes who resorted to these having had to do penance before re-admission into their society. I think these sentiments would deter people really needing relief, but I would meet the case as described in my general evidence and watch the effect by systematic village inspections.

166. They are difficult of supervision, but it would be feasible. The matter is discussed in my general evidence.

167. (1) Almost entirely in grain.

(2) Grain.

188. They had to come to centres: but see my general evidence.

169. (1) Patwaris and other subordinates were not employed in distributing this relief. Nobody under the rank of a circle or assistant circle officer was employed for this.

(2) Not exactly in order to be placed on the gratuitous list, but perhaps they promised to surrender part of the dole but certainly not to pay money to receive testimony to the fact of their being eligible. I heard that chowkidars used to obtain a portion of the doles, but they were mere rumours. There was never any proof of this.

170. As regards distribution see answer to question 169 (1). There was no existing revenue organisation in this district for ascertaining eligible recipients.

171. A great deal in some parts of the district (see paragraphs 78, 126, 128 and 164 of my Famine Report).

172. No, it cannot be called large at any time, but it was larger than in any other district in the province. Famine being taken in time, wandering was effectively prevented. The maximum number of poor-house inmates was 1,659, or 237 for each poor-house, in the third week of June.

173. Professional beggars, wanderers, idiots, and invalids with none to care for them.

174. (1) Yes.

(2) No, not so long as professional beggars and waifs and strays of low caste or no caste at all were admitted to the same poor-house.

176. It was highest from June to September, but the general death-rate is always about at its highest then August being always by far the worst month. The mortality in poor-houses was higher than usual throughout, but this was to be expected as these institutions were to all intents and purposes simply infirmaries for invalids. The famine hospital and poor-house at each centre were treated as one being under the same Superintendent (a Hospital Assistant).

177. The great majority belonged to the district itself. There were in the Bettiah poor-house, however, a good many who came from Gorakhpore in the North-Western Provinces. They came mostly originally in search of work, and then found their way to a kitchen established by the Maharani of Bettiah, which was closed on the establishment of a State poor-house there early in March. There was some fresh influx to Bagaha and Ramnagar in July, but not large.

178. Certainly most of the inmates were in an emaciated condition, showing how hard-pressed they were until they found their way to the poor-houses. But owing to famine being taken in time, there was not much wandering and no apparent breaking up of households, except as noted in the last answer.

179. Except professional beggars, there were no persons in the poor-houses fit to work, and the minimum ration given in them was not enough to enable them to become fit. The professional beggars would never stay at relief works. What drafting there was, was not done systematically except from the Ramnagar poor-house, after the special weakly gang section was opened on the Tribeni Canal there.

180. (1) Yes, to sustain life; but not to enable the weakly to gain strength. The half and quarter rations prescribed for big and small children were, however, inadequate.

(2) Special medical treatment and comforts were given to invalids, but not to those who were merely weak.

181. Generally speaking, they seem sufficient. But I think the rules should provide for two classes of poor-houses, one for professional beggars and people of low caste or no caste at all, and the other for more respectable people in which everything possible should be done to preserve caste (see my general evidence). The hospital for invalids of the latter class should be a separate building. The poor-houses should be on a plan that will enable them to be started as small institutions, and added to as necessity arises.

182. I do not think legal powers are required in the case of beggars and wanderers, so long as any rate, as wanderers of good caste will not be put in the same poor-house as out-castes and the like. As for those who refuse to work, legal powers would be needed to get them to go to a poor-house at all. But such people will either eventually come to relief works or get so reduced as to entitle them to village gratuitous relief. It would be best not to resort to legal compulsion, as there is already too much prejudice against these institutions on the ground of their being something like Jail. No compulsion was actually used in Champaran, except in so far as this is implied in food being refused to those who would not enter to reside.

183. Not to any large extent. It was done where a number of the people were fit enough, but the answer to Section 179 applies here also.

184. (1) No.

(2) Yes, but not to come and go, and children who were in low condition or idiots were not allowed to leave.

(3) No.

185. This was the general method adopted of distributing village gratuitous relief (see my general evidence). At these centres only grain doles were given.

186. No: no able-bodied persons got such relief, not even those eligible under Section 141 (2) of the Bengal Code. The latter were relieved by the Charity Fund.

187. (1) No. The average number was about 1,000.

(2) No: they had to come only once a week.

188. I would not make it a substitute for relief works at all. It seems the most feasible way of distributing village relief: but, perhaps, I do not understand exactly what the precise character of the relief centres referred to in these questions is.

189. No. See last answer: our relief works, indeed, would have suffered less from being incommoded by the presence of many useless people had village relief, in whatever form, been fully organized earlier than was actually the case.

190. I do not recommend relief centres, except as a convenient method of distributing village relief, and therefore they must be accompanied by village inspection and in no way supersede relief works.

191. About forty square miles on the average.

192. Yes, largely. See answer to question 171.

193. Their main function should be as a test of the reality of the want (including in this term the absence of relatives able to give support) among those belonging to the more respectable castes who are incapable of working in the early and also in the final stage, and to afford effective relief to children when famine becomes so intense as to weaken the bonds of parental solicitude. They are not an efficient test in the case of low caste people or those with no caste: in the case of these, the condition of residence is necessary and this converts the kitchens into poor-houses. See my general evidence.

194. See last answer. Their main function should be independently of relief works. See also answer to question 198 below.

195. Yes. See answer to question 193.

196. Kitchens (except in Ramnagar, where they were really poor-houses) were started, as a substitute for gratuitous relief and as a means of securing effective relief to children, only when the famine was well advanced. Only those already on the gratuitous relief list and wanderers in low condition were fed at them, but all children who seemed to be underfed were allowed to be relieved there also.

197. (1) It is not easy to maintain strict supervision; but native officers of the Army were employed as kitchen-inspectors and were of great service in this matter.

(2) There was necessarily some waste, but not much. It might have been greater had kitchens been started earlier.

(3) Inspecting officers were appointed, and also, as a rule, cooking for the day was not begun until the people attended, and it was seen how many there were. Those who came very late having to do without food, if none was over.

(4) Under officials—circle officers with superintendents under them.

198. (1) In the case of children and adult dependants who have to come to the works, I think money doles may be given, as saving much trouble. These cannot be misapplied as the working members have to feed their dependants at the works. But where the number is large enough to make it worth while to have a kitchen at a work, it would be best to give cooked food, as this would ensure children being properly fed, and those brought being really dependants of the workers.

(2) Not in the case of children who did not attend at the works as dependants. Children on the village relief lists, and especially female children, were undoubtedly deprived of part of their grain-doles by their adult relatives when the famine became intense, *A fortiori* they would have been starved still more had we given them money-doles.

199. Advances aggregating ₹7,599 were made to petty land-holders and substantial cultivators for village improvement works.

Loans aggregating ₹2,64,826 were given to cultivators for the purchase of seed grain.

No loans were given for the purchase of cattle, or for subsistence except that a very small margin was allowed in seed loans for the support of the cultivator when engaged in tilling his fields.

200. On the employment of labour.

201. (1) Yes.

(2) More could have been advantageously spent in the north of Bettiah, I think, but there was uncertainty as to whether the Government of India would sanction the full amount applied for and the loans were therefore made as moderate as possible.

202. Village improvements: 10 half-yearly instalments beginning with 31st December 1897: seed loans: six half-yearly instalments beginning with the same date. (Under the rules of the Board of Revenue the first instalment of the latter is not realisable until the second also is due, and most loans were so given out before we were instructed to recover one-third by the 31st of March 1898.)

203. No.

204. I do not approve of subsistence advances to ordinary cultivators, but in the case of "persons of respectable position and family who are reduced to starvation," I should much prefer giving advances to giving gratuitous relief as contemplated in section 141(2) of the Bengal Code, and they themselves would prefer advances also as doing less violence to their feelings of self-respect. The matter is discussed in my general evidence. Such advances I would, as far as possible, make through their landlords, who would be collateral security for them: and all receiving them in one village should become jointly and severally responsible. Landlords, indeed, in these parts, at any rate, indigo planters, would, I believe, be ready to relieve Government largely of the support of their tenants generally if they could get advances from Government at a moderate rate of interest, and were allowed by law a preferential claim in realising famine relief advances made to their tenants similar to what they enjoy in the recovering of rents.

205. The class of people I refer to would never come on to works until whole families were reduced to a state that would render them incapable of doing efficient work in return for subsistence wages, and advances would, in the long run, be much more economical. It is assumed that the female members of the families of such persons would be *parda nashin*, and very very small amounts would suffice for their subsistence. They are the class also who might expect additional relief under Head III of the Charitable Relief Fund.

206. Every cultivator would indeed *want* to borrow; but it would be quite possible to limit the loans very strictly, and I do not think they need exceed what would otherwise have to be spent on relief, assuming the relief to be absolutely efficient. And, it may be taken for granted that the class referred to would sell and mortgage their property to the utmost possible extent to obtain private loans before they would resort to State relief works, and their ultimate indebtedness would be much greater than if Government gave them loans from the beginning at moderate rates of interest.

Questions 207-215. Regarding suspensions and remissions of Land Revenue.—No answers necessary, as nothing of the kind was resorted to in Champaran, a permanently settled district.

Questions 216 to 219. Regarding Forests.—Not answered, as there are no State forests or any private reserved forests in Champaran. The people near the hills in the North of Bettiah resorted freely to the jungles for various edible roots, berries and seeds.

220. Every endeavour should be made to get them adopted by respectable people, and as far as possible by their co-religionists. The rest it would be more economical and convenient in every way to make over to private orphanages, which should then, if they require it, receive a grant-in-aid from the Charitable Relief Fund. The cases most difficult to deal with are deaf and dumb *cretins*.

221. As a matter of principle, after the pressure of famine is over, I do not consider that the State is bound to maintain orphans any more than any other classes of the people who have been gratuitously relieved by it. But it is very difficult to ensure that private charity will look after orphans whose original villages are unknown, and as they are presumably unable to earn a living for themselves, it is incumbent on Government to give some aid to private institutions that will support them, if they will not do so without such aid. Where there is a Charitable Relief Fund, the aid should, however, come from it and not from the

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222. None occur to me beyond what is stated in answer to the further questions below.

223. No, except that Government is responsible for saving the lives of orphans while famine lasts.

224. See last answer. I would limit it as suggested in question 225.

225. I agree, except that the Charity Fund should be under no obligation to meet the cost of educating orphans "in some useful craft befitting their station in life," if this means fitting them for a position above that of ordinary labourers. If the station in life in which they were born is known to be above that, then the community to which they belonged should be expected to take care of them if it does not wish to see them degenerate into common labourers. If it is not known, then it should be presumed that they belong to the labouring class.

226. Theoretically there should be no overlapping, as the assumption is that the Charity Fund should not relieve any who are ready to accept State relief at all. But in practice it cannot ascertain properly who these are, and who at the same time really need relief, unless it waits to see whether they almost starve rather than apply for State relief. It should not, however, delay coming to aid of this class so long; and, therefore, there may be overlapping unless Government adopts the rule of not giving relief to any high caste people, and the Fund of confining its aid to such. Government might adopt this rule as regards gratuitous relief, but it should not as regards works. To guard against overlapping as much as possible, I would recommend the addition of the following words to Object III:—"As a general rule, relief under this head should be confined to families that observe the *parda* system." I think also that there should be a rule that the Government Circle Officers should supervise the working of the Local Committees of the Fund, and be supplied with lists of all on its relief list. I should also be inclined to limit charitable relief under Object III to supplementing aid given by means of State loans (see my general evidence, and also answer to question 204).

227. This would be a very acceptable mode of relief to such persons, and might fairly be recognised; but I do not think special shops needed. (See next answer.)

228. It would not interfere with private trade if the grain for those shops were purchased locally, and the grain-dealers told that it would all be so purchased if obtainable in the market and they did not form a ring to force up the price unduly. A system of giving the recipients orders on a local dealer to obtain a fixed quantity of grain at a certain rate would be in effect the same. No such shops were started in Champaran.

230. I certainly think so. It would be most effective if given just before the commencement of the agricultural season. This was the course adopted in Champaran.

231. Generally speaking, those unable to give adequate security for Government loans; and it should be presumed that all cultivators who had to resort regularly to the relief works were of this class. The aid might also be confined to those whose holdings are not substantially larger than would suffice to yield food enough to afford subsistence for one year to an average sized family.

232. Loans from Government, if obtainable, are preferable to free grants, provided that they are of moderate amount having regard to the solvency of the recipient. I do not think the Charity Fund should be spent in aiding solvent people at all.

233. If a cultivator could not afford to borrow enough to till and sow his fields properly and support himself while doing so without aid also from the Charity Fund, it would be better not to give him loans at all. The giving out of loans and donations would probably have to be done in conjunction and so hurriedly that the cultivator might never know exactly how much was a free grant and how much would have to be repaid; and even if he did know, the agency employed to collect the loans subsequently would probably find some way of persuading him that he would have to repay the free grants also, which would then be misappropriated. All the aid to such people should be from the Fund. With the adoption of piece-work at fairly liberal rates, I do not think it would be necessary to include in the grants a provision for the subsistence of the cultivator while engaged in tilling his lands, and under any system it is unnecessary to grant subsistence also to the members of his family not required for this.

234. Distinctly so. They have certainly enabled much land to be ploughed and sown in the north of Bettiah that would have remained uncultivated. They have also helped to preserve the status of many respectable families. Further the clothing supplied by the Fund has been a great boon in a season that was in Champaran unusually damp as the cold weather was setting in.

237. Clothing.

238. We had in Champaran only two forms,—monthly cash allowances and clothing. The former did most good at the smallest cost.

239. Yes, as this was the most necessary object next to the preservation of life itself, which Government undertook to be responsible for.

240. Undoubtedly seventy per cent. of it was spent in the north of Bettiah, where it secured the cultivation of much land that would otherwise probably have remained untilled this year. Much of the seed it helped to purchase had to be got from Gorakhpur.

241. I can answer for the Champaran district only. With the money given specially for the purchase of seed. I should say about 30,000 acres. Seed was very expensive. In addition, a good deal of the aid given to the respectable poor under Head III no doubt went in cultivation.

242. (1) The Police received small grants for the immediate relief of all casual cases under Section 166 of the Code and then passed on the wanderers to the poor-houses and Circle Officers.

(2) No, not large. A number came over from Gorakhpur, however, at an early period in search of employment in Champaran or Nepal, and found their way to a free kitchen at Bettiah they heard the Maharani had opened. At a later stage, in July, a number of people again came from Gorakhpur sufficient to attract the attention of more than one relief superintendent.

243. There was no deficiency in this respect in Champaran. Relief works were opened early enough to prevent wandering from the district. I have no experience with regard to the wandering of jungle people. In this district such people came to the relief works.

244. No; but most of the deaths in poor-houses were among wanderers.

245. Mostly from Gorakhpur (see answer 242). They were probably attracted in the first instance by the expectation of obtaining employment in harvesting the crops in Nepal, which were pretty good in the part of the country to the north of Behar. Hardly any wanderers came from Nepal.

246. No.

247. If only very few in number, it seems hardly worthwhile making any special arrangements. But if the numbers show a tendency to increase, the authorities of the District or State they come from should be informed and they should be requested to name a place, where drafts of them will be taken over after a specified date; wanderers should not be sent back, however until fit to travel.

248. The average death-rate of the 5 years 1891-95, was 38.2 and that of the 12 months October 1895 to September 1896, 40.92, and of the 12 months of the famine year October 1896 to September 1897, 34.6.

249. The higher rates of 1895-96 were due to a severe outbreak of cholera, and not to the scarcity, which really did not begin to be felt until the last two months of that period (August and September 1896).

250. No, as there was a decrease of 2.92 per thousand, due to unusual freedom from cholera, and the year was also less feverish than usual.

251. Generally speaking, the answer to this question would be in the affirmative. But it would be necessary to analyse the mortality under different heads before saying so as regards a particular year. For instance, the year 1892 was in this respect not unlike the year 1897, as both followed dry autumns with low mortality from fever, yet the death-rate in the former was 39.5, against only 34.8 in the latter. There was scarcity also in 1892, but not so great in Champaran as to require relief from Government.

252. In Bengal cholera is most prevalent in the dry season when the causes indicated would be in greatest operation: but in Behar it is worst when the rains begin, and I am not qualified to pronounce an opinion as to how far an increase of cholera at that season could be attributed to the causes indicated. It is, however, a fact that cholera was very bad in Champaran in 1892 and 1896 which followed unusually dry seasons, but in 1897, which followed a still

drier one, there was comparatively little cholera. The course of the disease was marked by special features which indicated that it was kept from being very prevalent by great precautions taken to keep the water-supply pure, and prevent the spread of the disease wherever it broke out.

253. It was certainly observed that bowel-complaints of various kinds were unusually prevalent, and that too at the times when the people were largely eating immature and uncooked food, and unaccustomed forms of it, such as wild millets. Unusual mortality from this cause is not, however, disclosed in the returns, but that is because the classification of the causes of death is really done only by ignorant village watchmen. Under causes not specially classified there was an increased mortality of 0·94 per thousand, and this would include dropsy which was a usual accompaniment of illness from unwholesome food. Part of the mortality ascribed to fevers is probably attributable to the same cause, as, in spite of unusually small prevalence of malarial fever, the mortality shown under this head was only ·09 per 1,000 less than the average.

254. The minimum ration as supplied in poor-houses and kitchens was sufficient to maintain the recipients in health; but, if reduced in condition to begin with, they could not regain strength on it. The half and quarter rations given to children were not sufficient.

255. (1) There were no deaths directly due to starvation; the privations which the people suffered undoubtedly increased their liability to succumb to illness, but the number who may have died indirectly from privation is not known. The deaths among wanderers in poor-houses were for the most part due to privation.

(2) The general mortality of the famine period was greater amongst men than amongst women, but this is always the case. It was, however, more marked during that period than usual. From October 1896 to September 1897, the deaths of the females were only 42·5 per cent. of the whole, whereas in 1896 the percentage was 44·1, and in the preceding five years an average of 45·3. This excess of male deaths no doubt indicates imperfect registration throughout.

(3) Parents, under the stress of want, did frequently neglect their children, going so far apparently as to deprive them of a part of their doles, for the children often became very emaciated as the famine went on. They were also eager to dispose of their female children for insignificant sums. There was, however, hardly any actual abandonment of children.

256. This question does not arise in Champaran.

257. (1) There is nothing to add here to what has been said in answers 13 and 14.

(2) Mortality was in no way due to insanitary conditions. On the contrary, much attention was paid to sanitation.

(3) Yes.

258. As things turned out the staff was not insufficient, but we could have made good use of more officers of this class if available. It would have been, I think, a good thing had an officer of the rank of Civil Surgeon been available for purely famine duty, so as to inspect poor-houses, kitchens, relief workers and recipients of gratuitous relief, and see to proper precautions against an epidemic of cholera being promptly taken, and the disease effectively grappled with should it break out. Champaran had this advantage for nearly two months, however.

The Medical Staff were well provided with medicines and medical comforts.

259. The population of Champaran has increased largely since 1871. At the census of 1872, it was 1,440,815; in 1881 it was 1,721,608 or 19·48 per cent. more, and in 1891 it was 1,859,465 or 7·9 per cent. more than in 1881. It is impossible to say what has been the increase since 1891, as births did not begin to be registered till 1892, and at first the registration was probably very imperfect. If the enumeration of 1872 was correct, the increase in the 19 years to 1891 has been 29·06 per cent.

260. The birth-rate of Champaran in 1892, the first year of registration of births, was much below the truth (only 24·93), but after that there was a steady increase until 1896, inclusive. In 1897 there was a marked falling off. The death-rate has varied greatly, as it was very high in 1892 and 1894; but, excluding these years, there has been a steady increase since 1891.

261. Taking the four years 1893 to 1896 inclusive, the average birth and death-rates have been practically equal, namely, 262,098 deaths against 262,291 births in the four years. The births were in excess in 1893 and 1895 and the deaths in 1894 and 1896.

262. The period referred to in the last question is too short to found any conclusions upon. The increase shown by the census figures from 1872 to 1891 was probably much above the truth owing to imperfect enumeration in the former year. The increase from 1881 to 1891 was due not only to natural causes, but also to the smaller density of the population than in the adjoining districts, leading to immigration into it. No less than 13·3 per cent. of the population of 1891 consisted of immigrants, mainly permanent (see para. 140, page 101 of the Bengal Census Report for 1891); and the increase in the number of immigrants that took place between 1881 and 1891 represented 3·2 per cent. of the population of the former year.

263. Speaking generally, the influences specified have no doubt tended to remove various checks on the natural growth of the population that formerly existed, but I should not be inclined to attribute much effect for improved sanitation or the suppression of widow-burning.

264. The aggregate area under food-grains in Champaran (reckoning double crop land twice over) was estimated by Sir A. P. MacDonnell, in his book on the food-grain supply of Behar in 1876, to be 1,656,617 acres, against an area of 1,670,000 acres ascertained at the recent survey. The area under food-grains has not, therefore, increased *pari passu* with the increase of population, but very probably the estimate of 1876 was excessive. The food-producing capacity of the district has been increased only very slightly by irrigation in the interval; but the production of food-grain must have been very largely increased by greater care bestowed on cultivation, as it more than suffices for the requirements of the present population in ordinary years.

265. So far as the increased production of food-grains keeps pace with the growth of population, as has been apparently the case in this district, the increase of population ought not to have much effect in bringing about a rise in the price of food; but the increase in population elsewhere, which stimulates exports from this district, would raise prices in it.

266. No; so far as wages are paid in money. The rise in these during the last 20 years has been only 11 or 12 per cent. against a rise of about 30 per cent. in the price of food grain. But field labourers, except those who work for indigo factories, are mostly paid in grain.

267. (1) I should say so, except in so far as the rise in prices may be due to a depreciation of the currency.

(2) Yes; and I think these circumstances combined to bring on famine conditions at an earlier stage during the recent famine than on previous occasions.

268. The tendency would be for the people again to multiply up to the limit of production; but the increase in the food production may be so great relatively to the natural rate of the population, that it may be a long time before this would come about. I do not, however, think that the people will exert themselves to effect a substantially larger increase in the production of food than is required to keep pace with the population, whatever irrigation facilities or other improvements may be placed at their command. A disturbing cause would be increased prevalence of malaria consequent on extension of irrigation, as suggested in question 272.

269. It is very difficult to answer this question as regards India. The population must go on increasing so long as Hindus consider it a religious duty to beget a son and, if one may use the expression, a reserve of sons, and female infanticide is at the same time suppressed. The prohibition of early marriages might, however, have some effect, but this seems hardly practicable. The amount of food available for the support of the people could be increased by improved methods of cultivation and by reclamation of land; and the extension of manufacturing industries might have a great effect in providing the increasing population with the power to import food. The question is too wide a one to discuss off-hand.

270. I do not think emigration could have the effect in India it has had in England, for a very long time yet to come, as it does not take the form of permanent colonisation, except to a limited extent. In the long run, moreover, in the absence of other causes at work, emigration would only be a temporary remedy. It seems to me that it is going too far to say that emigration has solved the problem in England, as other causes have been at work, particularly industrial expansion which enables a large portion of the people to live on imported food.

271. I am unable to look forward to a time when the mass of the people of India will rise beyond the present level of the lower classes in England in this respect. As regards

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272. In so far as the extension of irrigation results in the generation of malaria, the facts suggested indicate that the increase in food production due to irrigation need not be so great as what may be called the natural rate of increase in population. But the establishment of the equilibrium suggested is a question of degree. A considerable increase in the production of food-grain may result from irrigation that does not generate much malaria. The extent to which the drainage of the country is interfered with, has to be considered in this respect. Much may be done to improve the facilities for irrigation that would be extremely useful in saving crops in a year of drought, but which would not be resorted to in ordinary years to such an extent as to produce malaria. As an end in itself, equilibrium brought about in the way referred to could hardly be a result to be desired. If it were, it would mean that nothing should be done in the way of facilitating drainage to mitigate the malaria irrigation might naturally produce. The malaria generated might be so great as to impair the efficiency of cultivation; and this should certainly be guarded against. On the other hand, if the extent to which malaria might be produced by irrigation would have a serious effect on the health of the people, I do not think it should debar the carrying out of schemes that might have the effect of preventing famine in tracts now liable to a periodical recurrence of this; as irrigation could be restricted in ordinary years to such an extent as to prevent any great increase in malaria.

273. The principal food grains consumed are rice, kodo (*Paspalum sorobiculatum*), maize and barley. Rice and kodo are consumed all the year round; maize mostly from September to March, and barley (instead of maize) from April to August. The quantity consumed is somewhat less in summer than in winter. There is no difference in the consumption of the above grains between town and country, but towns-people usually take some sweetmeats for the morning repast, and also an extra afternoon repast, as will be noted in the next answer.

274. The usual meals are three, namely;—

- (1) A morning light repast called *panpido*, consisting merely of 2 chattaks of parched maize or barley, and taken between 7 and 10 A.M.
- (2) A midday dry meal, called *kalewa*, consisting of either bread or meal of maize or barley, the quantity being 8 chattaks in winter and 7 in summer. With bread a very small quantity of cooked vegetables is usually taken, and with meal sometimes some raw vegetables.
- (3) An evening cooked meal, also called *kalewa*, taken between 8 and 10 P.M., and consisting either of 10 chattaks of boiled rice or 8 chattaks of boiled kodo, together with 2 chattaks of peas-meal (*dal* of *rahar cajanus indicus*), and some cooked vegetables. In summer the quantity of rice may be from 8 to 10 chattaks. Kodo is an inferior food to rice, and only 8 chattaks of it can be taken at one meal.

The above is the food of ordinary labourers in the country. The only difference as regards well-to-do labourers or artisans in the town is that, the morning *panpido* of the latter generally consists of sweetmeats, and that in addition they usually take another similar *panpido* in the afternoon.

No drinkables are taken except water.

Everybody would prefer taking rice for the midday meal as well as for the evening one, but they cannot usually afford this.

275. From December to February the poorer classes in the southern half of the district sometimes live entirely on sweet-potatoes and yams, which grow in that part of the district only.

If the usual food grains are too dear or unprocurable, the people take as their principal food *rahar* (*cajanus indicus*), peas, lentils, *murua* millet (*cleusine corocana*) *sauwan* millet (*panicum frumentaceum*), *tangni* millet (*setaria italica*) and *bajra* millet (*penisetum typhoideum*).

276. Among the substituted food-grains named, the various pulses are preferred to the millets, being regarded as more nutritious. Except in times of scarcity, pulses are taken only as a subsidiary food, in the form of *dal* or bread, but during the recent famine *rahar* had largely to be consumed as a principal food, as it was the only crop that did fairly well and was consequently cheaper than others. But it produces a feeling of nausea if taken as a principal food

for some days together, and bowel-complaints arise from eating too much of it, or of peas. It is objected to lentils that they produce dimness of sight, and to *khesari* pulses (*lathyrus sativus*) that it causes loin palsy.

277. I do not know what the people say of any grains not used as food grains that might perhaps be consumed as food in time of famine. Of edibles that grow wild, the chief objection is that they produce diarrhoea and dysentery.

278. Rice and *dal* of *rahar*. Usually Burma rice was the only grain procurable in the market in sufficient quantity. The food grains locally produced could be procured only in dribbles, as the people parted with them usually only to obtain salt, tobacco and the like. Reliance, therefore, had to be placed on imported grain, and 85 per cent. of the rail-borne import was rice.

279. Two meals a day were given, but in kitchens often only one. They each consisted of some boiled rice and *rahar* dal, and some vegetables. The only drinkable given, except to invalids, was water.

280. There were no complaints, as the people prefer boiled rice to any other food, and it so happened, as already remarked, that this was the only food grain procurable in sufficient quantity to form the principal meal.

281. The allowances for adults (non-labouring) compare as follows:—

	Poor-houses and kitchen diet.	
	chs.	chs.
Principal food	8	5
{ Rice	8	5
{ and also either		
{ maize or flour of	5	5
{ wheat or millet	(4)	(4)
{ Dal	1	2
{ Vegetables		
{ and condi-		
{ ments	1	3
{ Oil	1	1
{ Salt	1	1

In the poor-houses and kitchens women got $\frac{1}{2}$ less rice than men, but the quantities for the other items were alike. In jails men and women are fed alike.

It will be observed from answer 274 that a labourer usually consumes 10 chattaks of rice, 8 chattaks of flour of maize or barley, and 2 chattaks of parched maize or barley in the day, besides 2 chattaks of dal, in all 22 chattaks of food grain, as against 9 chattaks given in the poor-houses and kitchens and representing the minimum wage on relief works, and 15 chattaks given to a labouring prisoner.

282. I do not think that the high level prices speedily attained between September and November 1896, and which continued throughout the period of famine, was unreasonable having regard to the failure of the local harvests, the state of the stocks, and the cost of replenishing them when prices were unduly high on account of the unprecedentedly widespread character of the failure of the crops throughout India. The early stage at which prices attained a very high level in a great part of India was no doubt attributable, not merely to the extensive failure of the crops, but to the comparative equilibrium in prices in different parts of the country, produced by improved communications (especially railways) and wider and prompter information as to the state of the market in different places.

In Champaran prices went on rising all through until the middle of August, with the exception of a few weeks after the spring harvest; and as they continued 50 per cent higher than the average right on until December 1897, in spite of a good *dhadosi* harvest and excellent prospects for the *aghasi* and *rabi* harvests, it is certain, as other considerations also show, that stocks were practically exhausted and that more grain was not imported, in spite of the high prices, than was needed. Prices therefore were not unreasonably high or more than sufficient to stimulate the importation actually needed. But for the large importation of Burma rice by rail, and the knowledge that there was more of it available, prices in Champaran would have risen much higher than they did at certain times.

283A. Relief was necessary in all the districts adjoining Champaran.

284. There was an almost continuous rise in prices right on from the middle of September 1896 to the beginning of March, when the spring crops began to come in. They then fell until the end of April, after which they again rose continuously (except slightly at the end of May) until the middle of August, when the *dhadosi* harvest was assured. There were thus no substantial fluctuations: but the rise

was very sharp in the latter part of November, and again, in the interior of Bettiah, during May. The former was due to the passing away of all hope of rain for the *rabi* sowings (Champanan got none of the rain that most of the other parts of Behar and the North-Western Provinces got about November 22nd); and the latter to congestion of traffic in imported grain on the railway which for a time discouraged importers. Except in the latter case, the import trade responded to the rise that took place. In this case the obstacle was the uncertain duration of the time the Bengal and North-Western Railway would take to bring up consignments and the loss that took place through pilfering en route.

In the early months there was some hesitation on the part of dealers in importing, owing to a vivid remembrance of the extensive importation by Government in the last Behar famine of 1874. The grain dealers were assured from the beginning that Government had no intention of importing, and before long they became confident of this when they did not see it moving at all. The greater part of the imports was from Nepal. The failure of crops in the portion of that country facing Behar was not great, as irrigation from hill streams is freely practised there and the population is sparse.

285. The rates away from the grain marts were always somewhat higher than at these; but there was no unreasonable enhancement of rates. In the most distressed tract at one time, however, when there was undue delay in the receipt of consignments of imported grain, owing to a congestion of traffic on the railway, prices in the north of Bettiah rose very sharply to a rate much higher than the prices at Bettiah itself than the differences in the cost of carriage and profit of the dealers would justify. This was because it was apprehended supplies there would give out entirely. Special efforts were made to remove the congestion before such an emergency could actually occur.

286. Yes. At the relief works, if any complaints were made, the bunniah was told we would replace them there by others.

287. There was no exportation at all, except for a little at the beginning—September and October—when prices were higher up-country than in Champanan. This was speedily stopped by prices getting higher in Champanan, and they went on rising for long after prices in the North-Western Provinces fell. This export seems, therefore, to have been due only to a temporary difference in prices.

288. No fortunes were made. The business done was steady and not of a speculative character.

289. The grain dealers' stocks were all depleted at an early stage, but were thereafter kept replenished by steady importation.

290. Some landholders and very substantial cultivators had private stocks; but, as a rule, not more than sufficed for their own requirements for about a year. This surplus they generally held up, not from panic but to make sure of their having throughout enough for their own requirements. Generally speaking, these stocks existed only in the parts of the district that had better crops than the rest. A very few landholders may have had what were really *surplus* stocks; but they kept them chiefly to lend to their tenants when the cultivating season came round.

291. Yes, I believe so. There was also less difference than usual between the price at which they sold and the bazar price, namely, a quarter of a seer, instead of one seer in the rupee.

292. I am not in a position to answer this question definitely as to dealings among grain dealers themselves.

293. There has been a considerable diminution, but I cannot express it quantitatively. The reason is the growing indebtedness of the cultivating classes in Champanan and the facilities the *mahajans* now have with the extension of the Railway to the district for exporting the grain hypothecated to them. I may observe that grain is not stored in underground receptacles in this part of the country.

294. Yes; see last answer.

295. In Champanan there are few proprietors of land except large landowners, and there are no State raiyats. If by under-tenants are meant tenants holding under private landlords, then I should say that about 4 per cent. of them came on to State relief, taking an average all throughout the operations. The percentage was considerably higher at some stages.

296. They were landless labourers and petty cultivating tenants, in about equal proportions.

297. In the case of the cultivating tenants of land, it was due to failure of crops which left them without resources and in a state that kept their *mahajans* from making them further advances. In the case of the landless labourers, it was due to the cessation of employment. Except in the matter of the construction of the Segowlie-Baksaul Branch Railway, which is a line only 17 miles long, passing through the least distressed part of the district, non-agricultural employment fell off as much as agricultural employment.

298. European residents for the most part raised the wages of their domestic servants, and indigo factories generally sold grain to their employes at a rate considerably cheaper than the bazar rate; but beyond this, wages did not go up. In the case of agricultural labourers paid in kind, wages were actually reduced, as in lieu of grain they were paid money wages at what was about the usual rate of 10 to 12 dumpy pice, *i.e.*, about 1½ to 1¾ anna, besides a small quantity of grain as a dry meal in the day-time, namely, only a quarter of a *kutch* seer or 1½ chattaacks standard weight. In ordinary years they receive wages in kind amounting to 8½ *kutch* seers (*i.e.*, nearly 2½ *pucca* seers) of maize or 7½ *kutch* seers (*i.e.*, 3½ *pucca* seers) of kodo millet. At the average price of maize throughout the twelve months of famine (11½ seers per rupee), the above money wage of 1½ anna would purchase hardly 1 seer 3½ chattaacks, so that the total wage paid during the famine year represented only 1 seer 5 chattaacks of maize as against an average of nearly 2 seers 12 chattaacks, *i.e.*, less than half.

299. Not in Champanan, where industries have always been insignificant.

300. I have no experience of previous famines. So far as Champanan is concerned, I have discussed the matter in paragraph 190 of my final famine report. On the whole, I do not think that the mass of the people have greater resources for meeting famine than formerly, except in so far as the extension of railways secures them a supply of grain when it is required. There are in the district comparatively few small landlords, or substantial tenants, who are the class that have chiefly benefited elsewhere by the better prices obtained for surplus produce owing to the improvement in communications. The condition of the smaller cultivators has not improved, as they are thriftless and have become much indebted; and that of the landless labourer, unless when paid in grain, has retrograded.

301. Persons with experience of former famines in this District have informed me that they have observed more high caste people resorting to relief works than formerly. They seem as reluctant as ever to go to poor-houses.

302. It is said that there was, on the whole, less selling of jewelry, brass pots and cattle than formerly; and the reason assigned for this is that relief arrangements were organised sufficiently early to prevent this, and that, owing to better supervision, there was less interception by the subordinate staff of what was intended to reach the applicants for relief. The depreciation of silver did not seem to make people more reluctant to sell than formerly.

303. It was not found necessary to take any action of the nature indicated. When the grain-dealers of Bettiah declared, however, in May 1897, that they could not afford to go on importing if there could be no certainty of receiving consignments by rail within a reasonable time and without having suffered loss from pilfering in transit, pressure was immediately brought to bear on the Bengal and North-Western Railway Company to remove these causes of complaint, which was done. The dealers were assured that if they had any complaints to make in future they had only to represent them, and steps would be taken for their removal.

303A. In Ramnagar, where stocks were shortest of all and which was 28 miles from the railway, a local dealer was assured by the Relief Superintendent (Mr. Still) that if he imported grain in sufficient quantity, all grain wanted for gratuitous relief would, if he wished, be purchased from him at a certain percentage higher than the rate current from time to time at Bettiah, the railway terminus; and that every facility would be given for the sale of his grain at relief works. With this assurance, the dealer in question started a business, and kept importing steadily throughout, the only hitch being when grain ran short in Bettiah as described in the last answer.

304. On the assumptions made, I think that the action of Government would not affect the activity of private trade, that is, if the dealers were made perfectly sure from the beginning that Government would not import more than the notified amount (unless perhaps on their themselves confessing their inability to import enough); but at the same time I do not think that this would cheapen the cost of relief of

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the prices of food grains in the open markets, as it would not lead to more grain being imported than if the whole were left to private dealers. The latter would regulate the extent of their importation by the knowledge that Government would import so much. The action of Government would have some effect on the cost of relief and prices in the event of rings being formed among dealers to raise prices unduly; and it is possible that Government could save the equivalent of the dealers' profit in itself supplying grain to the recipients of relief. The difficulty would be for Government at an early stage to forecast the extent to which it should import grain. What Government might do would be to lay in a moderate supply of grain at an early stage, and notify that this would be all it would import, and that it would use it only in the event of the grain in the district running short or a combination being formed to raise prices unreasonably, and then only to those who were admitted to public relief. But it would be well not to attempt this except in a few districts where there might be a danger of supplies running short.

305. Such rings were not formed in Champaran.

I think they could be formed in a district like this, at any rate in the Bettiah Sub-division, and might be if the need for importing lasted for more than one season, by which time the dealers might learn to combine all together for their mutual advantage. A feasible method of breaking them would seem to be for Government to endeavour to induce some good Calcutta firm, with the aid of advances if necessary, to send up grain to the district and agents to take delivery of it, and distribute it to relief works and relief centres. It would not be necessary, to begin with, for more to be sent than might be required to feed the recipients of public relief. If these got grain at a rate considerably cheaper than what the ring were holding out for, people unable to pay the latter rate would go to the relief works, and the demand slackening might lead the dealers to abandon their tactics. Government could guarantee the Calcutta firm against loss by undertaking to pay a certain rate above the Calcutta rate for the quantity of grain, it might state would be needed for those on relief. I suggest this indirect method, because in this way the local dealers might never learn that Government were interfering in any way beyond communicating the knowledge of remunerative prices being obtainable to the Calcutta dealers.

(President).—You were Magistrate and Collector of Champaran during the famine?—Yes, throughout the whole period.

How many years have you been in the Indian Civil Service?—About 19½ years.

Did you ever before have any experience of famine or relief work?—No, absolutely none.

(Mr. Higham).—Please turn to your written statement 3rd head, 1, para 9. You propose at first the universal introduction of piece-work. You think it could be adapted to all conditions and degrees of distress?—I propose the universal introduction of piece-work. I think it should be introduced with different grades of rates, and that it should be adhered to until it is proved not to be adequate for the purposes of relief. But it is necessary to have different grades of rates.

Then you consider it necessary to introduce a number of different grades?—Yes, three at least and perhaps four.

How many grades did you yourself employ?—Three. My highest rate was double my standard rate.

Do you consider that any one who is fit to labour at all could earn for himself a living wage on piece-work?—Yes, it is proved by experience in the famine. If the rates are properly adjusted all can earn a living wage. I think even the feeblest, if fit to labour at all, can do so.

But how about the dependants of these feeble people?—I think that presents no difficulty. The feeblest people naturally have not so many dependants as the able-bodied, and therefore they do not require to do so much work to earn a livelihood for themselves and their dependants. Anyway, the rate should be adjusted to cover this.

What was the average rate earned by your piece-workers on the Tiibeni Canal?—2½ annas per male unit.

And what would the Code rate have been then?—2½ annas. And at the time of highest pressure it would have been the same as that actually earned, namely, 2½ annas.

Then you think that piece-work would provide for everybody?—Yes, but you must have kitchens and poor-houses along with that system.

Do you suppose that if you had had piece-work throughout the whole famine you would have been able to dispense with village gratuitous relief?—Yes, if we had begun with piece-work at the very beginning and at a sufficiently high rate, it would have been enough to have had kitchens, poor-houses, and infirmaries.

How do you think payments should be made?—On piece-work I recommend payments being made to the head of the gang, provided the gang is voluntarily formed and is not too large.

What is your opinion about the special Sunday wage?—I would have no special Sunday wage on piece-work, but I would allow the people to work on Sundays if they wanted to.

One difficulty about piece-work is the difficulty of fixing a fair rate, is it not?—Yes, no doubt that is a very difficult thing.

Who do you think should determine the rate?—I think the District Officer should fix the rate with the approval of the Commissioner.

Do you not think the matters to be considered in fixing it, such as the capacity of the labourers, are of a nature that would make the Executive Engineer the most suitable officer to fix the rate?—I certainly would not allow it to be fixed by any officer of the Public Works Department. It should be the Collector's business to fix the rate with the Commissioner's approval. The Public Works Department Officer would be able to, and certainly should, give the Collector advice, but the eventual fixing should be left to the Collector. The fixing of the rate is the essence of the whole system as affording adequate relief and that should not be left to the Executive Engineer.

What functions would you assign to the Superintending Engineer with regard to relief works?—I would assign to him the duties solely of an inspecting officer. I would not give him executive control over the works.

In fixing your rates you worked by Mr. Glass's table?—No, not exactly; but we took into consideration the digger's task as laid down by him.

With regard to distance, what is the maximum distance you consider people should be asked to go to get to the works?—Fifteen miles should be the maximum. With piece-work you can fairly safely ask them to go 15 miles. But with task-work they should not be made to go so far, as theoretically they would not earn enough to keep them going when going off to their cultivation with every shower.

On the Tribeni Canal from how far did you draw the people?—We had no works within about 10 or 12 miles of the Canal.

Did you find people leave the works there after a shower of rain?—Yes, they always left for their fields when rain fell.

(President).—Is it because the village gratuitous relief system was greatly abused during the late famine that you propose to do away with it in future?—No, certainly not. I simply think that piece-work accompanied by kitchen relief is a more efficient system.

Village relief is very effective. It involves close inspection of the villages, does it not?—Yes, no doubt. And in my system, too, village inspection must certainly continue even although village relief is abandoned.

(Mr. Holderness).—Do you think your anna estimates of crops are to be relied upon?—Yes, I think, on the whole, they are fairly approximate and reliable. I have had considerable experience of these valuations and they are based on information gathered from competent observers and I am inclined to think they are pretty trustworthy, but in this I am speaking only for myself.

If you had this system of piece-work which you advocate would it still be necessary to have people in charge of circles?—Yes. It would be absolutely necessary to continue village inspection. We would have to watch what effect the system was having on the people. And the kitchens, too, would require a great deal of supervision.

What is the size of your circles?—Forty or fifty square miles.

Do you think your piece-work system would increase the cost of famine relief?—No, I think it would be certain to reduce it largely.

But the average wage earned would be much higher?—Yes, no doubt that is an essential part of the system. But then it is proved by statistics that the workers

did not bring to piece-work anything like the number of children and weak people that they brought to task-work.

Then the numbers would be lower?—Yes.

But the amount of work done might be greater?—Yes, that follows with payment by results unless they are content to earn very little indeed.

Is there room in Champaran for a programme of large useful works?—Yes, I think so. But still you cannot do away altogether with small works. The maximum number of works I had open at any one time was 84 in a district of 3,500 square miles; so that it is a mistake to suppose we had a lot of petty works near one another.

As a matter of fact your people had to come considerable distances and they did so rather than live on the works?—Yes. As regards the desire on the part of the Bombay authorities to have a distance test, to which fact my attention is now drawn, I would say that possibly one reason is that they perhaps always pay at least a minimum wage.

You think your famine returns are too elaborate at present?—Yes, I think they are too elaborate and are capable of reduction. But I have not gone very fully into that matter yet.

Would you keep the male unit system?—Yes, certainly. I think that is the only effective standard for comparing wages and work done; but I would make the calculation proportionate to the relative wages of men, women and children.

You found the male unit system very useful?—Yes.

I see you advocate State loans for subsistence. How would you give these?—I would give these through the Zemindars, making them responsible jointly, and allow them to be used for subsistence. They would certainly require to be given with great discrimination. I would only give them to that class of people who would almost rather die than go on works—the class referred to in section 141 (2) of the Bengal Code as to be relieved gratuitously rather than sent to works.

(President).—I see that one witness has been speaking in his written evidence of the rapid growth of population. Do you think there is room for a consider-

able increase of population in Behar?—In my own district of Champaran there is room for considerable increase of population. But certainly in most parts of Behar there is no room for any increase.

(Witness).—Before concluding my evidence I would like to make one or two remarks. Mr. Sealy in his evidence said something to the effect that at one period of the operations Mr. Still struck 5,000 people off gratuitous relief, that a great number of these people never came to the works, and from this he drew the inference that these people must have had some resources of their own. As a matter of fact Mr. Still explains to me that the other resources referred to came from the earnings of relatives and others on piece-work; and that they preferred to go to the sections where these were working, rather than to the special section for weakly people, where they had no relatives.

Another point I would mention is that Mr. Still spoke in a way that might lead it to be thought that the gratuitous relief list was largely increased by his turning off people from the works, who were sitting there earning the penal wage and doing no work in return. I should explain what my orders in this respect were. My orders, which were issued on the 2nd of January, were that nobody was to be turned off the work in this way whose failure to perform the task was in any way due to weakness. My order referred only to able-bodied idlers who would make no effort to work. And these idlers never came on to gratuitous relief. Those who eventually came on to gratuitous relief were the weaker members who were left at home. The stronger returned to work, and with fewer in the gang would secure a shorter lead.

Another point I would notice is that Mr. Sealy said he had heard there was a complaint from the railway people that our relief works were too attractive and prevented them from obtaining the labourers they required. As a matter of fact no complaint of this nature was made to me, but I heard that the railway people were saying this, and I had a very searching enquiry made. The result of the enquiry was to show that the complaint was groundless. The railway people were offering a rate which, at the then high prices, was utterly inadequate: the lead was a very long one and over a fence, and the contractors who were doing other sections of the railway had no difficulty in getting what labour they wanted.

Mr. D. J. Macpherson.
29th Jan.
1898.

At the Additional Commissioner's Office, Bankipur.

SEVENTH DAY.

Monday, 31st January 1898.

PRESENT:

SIR J. B. LYALL, G.C.I.E., K.C.S.I. (PRESIDENT).

SURGEON-COLONEL J. RICHARDSON.

MR. T. W. HOLDENNESS, C.S.I.

„ T. HIGHAM, C.I.E.

RAI BAHADUR B. K. BOSE, C.I.E.

MR. J. A. BOURDILLION, C.S.I. (Temporary Member for Bengal).

MR. H. J. MCINTOSH, Secretary.

MR. E. MACNAGHTEN, General Secretary, Behar Planters' Association, called in and examined.

(President).—I think you are a Member of the Behar Planters' Association?—Yes, and Secretary.

You have been a long time in Behar I think?—I have been 34 years in Behar.

To what was the distress due?—To local failure of the rains and of the harvests, or to abnormally high prices or both?—Both.

Do you think the high prices were the natural result of failure of the rains, or would anything else account to your mind for the prices that prevailed?—Not altogether. I think the drain from outside, that is, the great export affected them.

(Mr. Holdenness).—To other districts?—Yes.

(President).—Was local trade as active as you would have expected?—I think so.

(Mr. Holdenness).—What district do you know best?—Mozufferpore. Recently, my work takes me over all four districts of North Behar.

Could people not on relief, that is, the general population, get grain at current market rates?—Yes, I think so.

There was always grain for any one who could pay for it?—Yes, at the price.

(President).—Up to the time of the failure of the rains, what had been the condition of the affected area? Had preceding seasons been favourable, or the reverse?—The preceding seasons had been bad.

How many seasons?—I should think two years. Generally they had not been good all-round seasons.

When the failure of the autumn rice harvest took place in 1896, did you expect, from your knowledge of the country, that famine would ensue?—Certainly.

Is the agriculture of the affected area specially dependent on timely and sufficient rain, owing to any peculiarities of soil, crops, absence of facilities for irrigation, or the like?—Yes, the staple crop is the rice crop. If the rains fail that fails more or less.

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Are there any facilities for irrigation?—No. There is no artificial irrigation. Practically, we depend upon the rains and the natural flood from the rivers. If there is heavy rain in Nepal there is probably local rain too, and a natural flood.

To what extent has the population of the affected area reserves of money or food for its support in the event of the failure of one or more consecutive harvests?—I think the reserve was astonishing. I had no conception there was so much money in the district.

What classes had reserves?—They all had astonishing reserves.

(Mr. Bourdillon).—More of money than grain?—Yes.

(Mr. Holderness).—Did they sell much Jewellery?—I didn't hear of it.

(President).—Did they sell cattle, did you hear?—I don't think so.

(Mr. Holderness).—Lotas or brass vessels?—I don't know.

Do you think the people who went on relief had any reserves?—I don't think so. They lived on the reserves as long as possible, and then went on to the works.

(President).—What experience did you have of relief works?—Personally, I had no experience. It is only hear-say information I have about them.

With regard to the labour-test, have the conditions of the task and the wage been such as to constitute a stringent test of necessity?—I believe the task was a small one, and that the man frequently did his early in the day. If it had been piece-work he could have done more work.

Do you think that, owing to the task being a small one, any considerable number of people who were not in real necessity were attracted to the relief works?—No, I should not say so.

Was the wage a mere subsistence wage?—I don't think he could save much, but it was quite enough.

(Mr. Holderness).—Was there a good deal of private employment elsewhere?—Yes, in the indigo factories.

Did these relief works compete with them?—I don't think so.

(Mr. Bourdillon).—The employment on indigo work was not continuous, was it?—No.

(President).—It has been alleged that in the present famine, the people have resorted to relief works with greater eagerness and at an earlier stage of distress than in previous famines. Is this your experience?—I think so.

Do you consider this is due to the greater liberality of the terms of relief as compared with those in force in former famines?—No. I do not think there was greater liberality as compared with 1874. I think the people remembered 1874. They knew they could go, and did go.

You do not think they went except in cases of necessity?—Only when necessity arose.

Has gratuitous home relief been given more largely and at an earlier date in this than in any former scarcity?—I cannot answer that.

Has it saved lives?—I think it saved a few lives.

Do you think it has in any way demoralized the people by making them more ready to accept charity?—No, I don't think so.

Do you think gratuitous relief was well done?—I cannot say that. I think a great deal of it got where it was never intended to get.

(Mr. Holderness).—It was intercepted on the way. At what point?—At every point.

(President).—I suppose that is rather hear-say; I mean to say, you were not in charge of gratuitous relief work and could not say?—No. I was not in charge of gratuitous relief work.

What is the net result of the famine, alleviated as it has been by relief measures on the economic condition of the population of the district, distinguishing between the land-owning class, the agricultural labourers and the trading and artisan classes?—Have these classes been permanently injured, or will they speedily recover their former position?—I don't think the classes have been permanently injured. I think they have already recovered their position.

Do you think that owing to the famine, they have incurred heavy debt with the mahajans?—They have incurred some, but not heavy, debts.

Did the mahajans continue to advance money throughout the famine?—More or less.

(Mr. Holderness).—The bulk of the people do not have much credit?—No.

Have the cultivators continued to pay their rent or have they had remissions?—They have had large remissions. Their rent was not demanded by planters.

Will that come in?—I think so, if the seasons are as good as the last kharif season. They can well afford to pay.

For a time the rents were suspended, were they?—Yes.

Did that help them?—Yes.

(President).—You don't know whether the cultivators who did not come to relief works got money from mahajans on ordinary terms?—I did not hear. I have no doubt they had to pay higher rates.

If they had to go to the mahajans, that would make it hard for them to pay their rents, would it not?—Yes.

(Mr. Holderness).—Was there any difficulty in getting seed?—No. I don't think so.

They got it mostly from the mahajans, did they not?—Yes. Those who did not have the seed themselves.

What is the ordinary method of interest on grain advances? Is it returned in money or grain?—I cannot tell you. I think it takes both forms.

(President).—Do you think that all the roads constructed as relief works will be of permanent service to the community, and that they will be effectively maintained in future, or that they will probably be abandoned as soon as they fall into disrepair?—I do not think they can all be effectively maintained from the road-cess funds.

Are they of a useful kind?—Yes, distinctly.

(Mr. Bourdillon).—The roads were mostly repaired; there were no new ones constructed?—No.

What form of repair was carried out?—It consisted of widening and raising them.

(Mr. Holderness).—Are these roads brought on to the books of the Local Board?—Yes, of the District Board.

(President).—What is your opinion of the value of village tanks as a form of relief work (i) as a means of employment of relief labour; (ii) as a means of permanently benefitting the villages in which they are constructed?—(i) Is most important. It is the best way of employing relief labour, because you have them all under control.

Are these village tanks in Mozafferpore merely for cattle or for irrigation also?—They are for watering cattle. Irrigation is seldom resorted to.

(Mr. Holderness).—Do the villagers drink from them, or have they wells?—They drink from them and bathe in them also.

(President).—What is the area that irrigation works may be expected to irrigate usually in ordinary years, and will the area that may be anticipated in years of drought be greater or less than may be expected in ordinary years?—It is only in years of drought that they want irrigation. They do not irrigate in ordinary years.

(Mr. Holderness).—Is that against such a project as the Trebeni Canal?—I cannot say.

(President).—Have you received any complaints from the agents of railways or other public companies, contractors, planters, or other private employers that the opening of relief works affected the supply of labour which they were desirous of employing? If so, give particulars of the complaints?—I heard that about the Bengal and North Western Railway. They could not get labour. I have not heard anything of the kind from private employers.

As far as planters are concerned, they experienced no difficulty, did they?—No. The planters paid higher wages than usual this year, as prices were so much higher. At first, before Government works were started, the planters employed all who came. The people were unable to work as well for the planters this year as in other years, because of reduced condition and emaciation. This rendered the planters' work more expensive than usual this year.

You said that the men could not do the usual amount of labour. How long had high prices been going on then?—For three or four months.

Can you say if relief operations were assisted in any way by the employment offered by private employers of all classes to able-bodied workers in their immediate neighbourhood other than professional earth-workers? Are

you aware whether any works were undertaken by them with this purpose which, but for the existence of distress, would have been postponed to a later date, or whether any special efforts were made or facilities afforded with the object of assisting in the relief of distress?—The planters started work and admitted all who chose to come.

What sort of work did the planters start?—Tank and road work.

Do you think it would be possible in future famines to utilize the agency of private employers in any way for the purpose of providing more extensive employment for the distressed?—No, I don't think it would.

Does the acceptance of such relief place any social or caste stigma upon the recipient?—Yes, it places a social stigma.

I suppose in the case of the higher castes?—Yes. I have known several instances of money being returned.

But not in the case of the coolie caste?—No.

What sort of people were those who returned the money?—Chiefly Brahmans and Kaisths.

Central kitchens, where cooked food is provided for all comers without any condition as to residence, have by some officers been preferred to gratuitous relief in the homes of the people, at least in the early stages of distress, or when distress is on the wane. What is your opinion on this point?—I think it is much cheaper to have kitchens, but I think there are a great many people who would not go there. The high class would sooner endure almost anything rather than go there. The only way to get at them is to give the grain or money in the villages.

You don't think any degree of management in the kitchens in the way of feeding the different castes separately or of separate cooks, etc., would have any effect?—No. I don't think so. As a matter of fact the cooks are Brahmans, I believe.

(Mr. Holderness).—It is a good way, is it not, of giving relief to low class people?—Yes.

Better than doles?—Yes, they would be likely to sell the doles.

Did they ever sell the doles?—Very possibly.

You would have kitchens for low class people then?—Yes. It is the best test you can have.

Would you limit the doles of grain to the higher class people as far as possible?—Certainly.

(President).—And to people actually unable to move?—Yes, to sick people.

Do you consider the opening of grain shops where wholesome food grains would be sold at rates below the prevailing market rates, a legitimate method of giving relief to respectable persons with small fixed incomes who, though suffering great privations from abnormal rise in prices, would not accept purely gratuitous relief either from Government or from the Charity Fund?—I think that would interfere with private trade entirely.

Did you see that tried anywhere?—No.

I think one of our Members (Mr. Bose) said it was done in some places in the Central Provinces, and one good effect it had was to steady the rise of prices, it kept down the rise. What is your idea?—That is supposing the bunniahs made a corner, but I don't think there was any corner here. I think it would be a good thing to have a reserve.

It is difficult to know if the bunniah is selling at proper reasonable rates or is going as high as possible?—It is not difficult here. I imported 20,000 maunds of rice for the planters from Rangoon, and they could not sell it at a profit, because it could be bought from the bunniahs at the same rate.

You don't think that importation interfered with private trade?—No. It was a drop in the ocean.

(Mr. Holderness).—The competition among the bunniahs is very great and no ring likely?—No. There are too many of them.

(President).—Would no caste feeling make them work in concert?—No.

(Mr. Holderness).—Did you find that people who do not ordinarily belong to the grain trade went into it during the scarcity?—I don't know. I only know one European who did.

(President).—Did that European do it to any large extent?—No. He imported perhaps 30,000 maunds.

The total amount of Burma rice imported was also a drop in the ocean, as compared with the consumption, was it not?—Yes.

In Calcutta a Hindu grain-dealer said that, but for that importation, prices would have gone up much higher?—They might have in other districts; I do not think it would have been the case here.

(Mr. Holderness).—If Burma had not had an available surplus, prices would have gone up, would they not?—I think you could have landed American maize at the same rates. I think the knowledge that it could be imported stopped a corner, but it would require a great deal of combination to get that corner.

(President).—Some dealers said that the mere report that wheat was being imported from America put down prices. Do you think that possible?—That is quite possible.

I suppose the bunniahs do not know much of the stocks of wheat, that is, not more than we know?—I don't think so.

(Mr. Holderness).—Is the bunniah well-informed of the general character of the in-coming harvest?—Yes.

(President).—Do you think the Charity Fund could be properly applied in relieving agriculturists, who are in a position to get statutory loans (*taccavi*) from the Government?—The Mozufferpore Committee were dead against that. They said, give it as loans, and if after two or three years the men are impoverished then strike it off, but do not make them beggars, if they do not apply to be made beggars.

(Mr. Holderness).—Eventually you gave money, did you not?—I don't know.

(President).—Do you think the expenditure of such a large portion of the Charity Fund on broken down agriculturists has, besides doing substantial good to the persons helped, resulted in great economic advantage to the country generally?—I think it did substantial good to the person himself and also the country. But I think they would have kept themselves respectable with loans.

(Mr. Holderness).—In any ordinary year don't they want money for loans?—Yes.

Do they always return it when they can?—Yes, in this particular place.

(President).—If, in spite of the privations consequent on scarcity of food, there has been little or no increase in the rates of mortality, do you attribute this result entirely to the success with which the distress has been met by relief measures?—I attribute it largely to the care that has been taken with the water-supply; the prevention of cholera.

What measure was taken?—The disinfecting of the wells.

In what way?—With permanganate of potassium.

Was that supposed to prevent cholera only or also fever?—Cholera principally, there was no excessive mortality.

How far do you think in ordinary years the returns of deaths are reliable? In Mozufferpore are they fairly reliable?—I think they are fairly so.

In a year like this famine year, when people move away from their homes and may die, do you think the returns will be as accurate as in other years?—No, somewhat less accurate. The people may have disappeared, but are not dead.

Do you think there were any considerable number of deaths, directly due to starvation?—No.

Did you see any reason to suppose that parents neglect or abandon their children?—No.

I think you had some experience of the famine of 1873-4?—Yes, and also of that of 1866.

In those famines the mortality was comparatively much higher, was it not?—In 1866 it most assuredly was, I never saw any acute distress in 1874.

(Mr. Holderness).—Do you remember the extent to which the harvests failed in 1866?—It was worse than this year, but there was not such a drain going out.

Prices were the same?—There was less produce, but what was produced, remained.

Whatever went out this year came back in the form of money?—Yes.

So there were resources still with the people?—Yes.

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Mr. E. Macnaghten. Then as to the crops of 1873-74, they were as bad or worse than this year?—I think much the same.

(President.)—When you knew the country in Behar in 1866 and before, do you think the cultivators were in the habit of storing more grain as a reserve than they do now-a-days?—Yes, certainly.

I suppose in the export of grain that took place this year from Mozufferpore, the most part went from the reserves or stores of the grain dealers, and only a small part from the reserves of the cultivators?—The grain dealers bought it from the cultivators and then exported it.

Do you think that with the famine very imminent, the cultivators would have the improvidence to sell a great part of their stocks?—I think so.

(Mr. Holderness.)—Could they help themselves?—I think the prices tempted them.

To what extent did the rice crop fail?—It was something like a four-anna crop in Mozufferpore, I think.

What was the *rabi* like?—A three-anna crop. It was very poor I think.

(President.)—When was it that the grain dealers bought grain from the reserves of the cultivators for export?—In November 1896.

It occurs, generally, after the harvest I suppose?—Yes, after the rice harvest.

This year the cultivators had very little to sell because the harvests failed. You think that in spite of the failure and the imminence of famine they would sell the small reserves they had?—Yes, I think so.

(Mr. Holderness.)—I suppose that, although the average was three-annas, in some villages there was a fair crop?—Yes.

These villages would have something to sell?—Yes.

So that the good villages sold their surplus, and it went out of the district?—Yes. I should like to state that, in ordinary years, the grain supply comes from Darbhanga, Sitamarhi and the region about the Kosi. Most of that went clean away and never came into the district at all.

Where did that rice go to, do you suppose?—To Gaya and the Central Provinces, I believe.

Were, in your opinion, the measures of State relief defective, either in principle or in their working?—They were certainly not defective.

(Mr. Holderness.)—Were they excessive?—It is very difficult to say. Possibly a little more money was spent than was absolutely necessary, but they were very effective.

(President.)—Can you make any suggestions for improving the sanitary precautions in regard to relief camps, poor-houses, etc.—No.

(Dr. Richardson.)—Did the people take any exception to the use of permanganate of potassium?—Not the least. In many cases the maliks came and asked the planters for it themselves.

They were convinced of its good effects?—Yes. That was the public opinion of the district.

As a matter of fact there was a wonderful absence of cholera?—Yes.

(President.)—Dry seasons are generally very free from cholera, are they not?—1866 was dry, but the cholera was awful.

Has the area under food-grains in your district increased *pari passu* with the increase of population? Or has the food-producing capacity of the district been increased by irrigation and improved methods of cultivation at a rate sufficient to meet the wants of the increasing population?—There is no spare cultivable land. All the cultivable land is under cultivation.

You don't think the intensity of cultivation increases as the population increases, do you?—The people get as much out of the land as they can. In Saran, they get more than they do in Champaran.

(Mr. Holderness.)—There is a limit, I suppose?—Of course. I should say that limit was very nearly reached.

(Dr. Richardson.)—Is it possible to reduce the numbers by causing the excess to emigrate to other districts?—I think they are doing so themselves.

Is that a temporary emigration?—Yes.

Do they bring money back with them?—Yes.

(Mr. Bourdillon.)—Do they not also send back money?—Yes.

(Dr. Richardson.)—He does good, does he not, by coming back and spending his money in his district?—Yes.

(President.)—What importance do you assign to this growth of population in bringing about in ordinary years an increase in the price of food, and so rendering existence more difficult and precarious?—I don't think I can answer that question.

Do you think there has been a permanent rise in the prices of food-grains in the last 20 years?—Yes.

A considerable one?—Yes. We raised the rate paid for Indigo cultivation in proportion to the rise in prices of food-grains. I worked it out, and it came to 16 per cent. in the last 18 years.

Have the wages of the labouring classes increased as rapidly as the prices of their food-stuffs?—I think rateably, or more, possibly.

Are you considering other employments as well as indigo?—Yes.

In England we know that the problem of the growth of population to press close upon the amount of food available for its support, has been solved by emigration to lands in need of population. Could the same solution be applied to India?—I do not think so in a measurable time.

(Dr. Richardson.)—What would be the difficulty?—The objection to leave the country.

(Mr. Holderness.)—Do you know anything of the proposals to colonise Assam?—No.

(President.)—Can you say whether the poorer labouring classes in Behar have large families?—Yes; the lower the caste the larger the family.

You don't think their straightened circumstances had any influence in checking the growth of their families?—Quite the reverse, a man thinks that the more children he has, the larger will be his earnings afterwards.

In England, unrestrained fecundity is confined mainly to the lower and more ignorant classes. The educated classes, with certain exceptions, exercise control and foresight with regard to the number of children they bring into the world. Can anything be hoped for from education here?—I don't think so at present.

In the tracts liable to famine in your district, which are the food-grains ordinarily used in their homes by well-to-do labourers and artisans?—Rice.

In summer and winter?—Yes.

Do they add to that?—There is *makat* in the season also *sama*, *marwa*, *kudo*, *boot* (gram) *kasari* and *cheena*.

Rice is the main?—Yes.

(Dr. Richardson.)—You mentioned *kasari*. Has it an ill reputation?—Yes. In districts where it grows, you see victims of the particular disease it induces.

How is it the men only suffer?—I cannot say. I have never seen a woman suffer, but I have seen a great many men affected.

(President.)—How many meals do the labouring people have?—Three, one in the morning, one in the day and one at seven or eight o'clock at night. The morning meal is anything. They generally eat something left over from the night.

Do they drink anything except water?—When they can get it, toddy, and sometimes the distillery staff.

Do you think the late high level of prices throughout India was on the whole natural and reasonable, being due to knowledge of the failure of harvests in certain tracts, and of unusual lowness of stocks in other parts of India?—I think it was reasonable. The high prices, on the whole, were natural and reasonable.

Do you think that in the country as a whole, there was grain enough for all probable contingencies and that the high level was due either to unreasonable panic, or to wild speculation and holding up for high profits?—I think there was no wild speculation.

You didn't hear of any gambling in time bargains?—No.

Were the grain dealers of these distressed tracts and of the surrounding country as active in trading in grain as you would have expected from the high prices? If not, state what, in your opinion, were the reasons or obstacles which impeded their activity?—I think the grain dealers were active, but at first they were not certain that

Government were not going to import rice as was done in 1874. Possibly that might have restricted their operations.

Was it not the case in 1874 that in spite of Government importing large quantities, the grain dealers also imported a vast amount?—Yes; I have seen that.

Do you think if Government had itself directly imported that would have discouraged local dealers?—Undoubtedly.

In the distressed districts under your observation, could the towns-people and villagers, who had money, but no private stocks of their own, at all times buy the customary food-grains and condiments at the rates quoted in the nearest grain marts, or had they sometimes to pay higher?—Yes. I think they had to pay higher sometimes.

In the distressed tracts under your observation, had any of the cultivators and land-owners what may be considered surplus private stocks of food-grains. If so, did they generally sell such surplus or hold up all they had from panic or other reasons?—Generally speaking, I think they sold. They had surplus stocks but were tempted to sell.

(Mr. Bourdillon).—Did they keep enough for themselves?—To some extent.

(Mr. Holderness).—When there is a good rice crop in Mozufferpore, is it more than sufficient for its requirements?—I don't think so.

(President).—While the high prices prevailed did those cultivators, who had grain to sell to dealers, get prices as proportionately higher than usual as those the grain dealers were selling at?—I think so.

To what extent has the habit of storing food-grains in pits or other receptacles diminished among the grain dealers, land-holders and cultivators of the tracts producing large crops of the common grains?—There is no such thing as storage in pits; it is too damp.

You think that the custom has diminished, do you?—Yes. When the last *makkai* crop was ripe the *mahajans* stood in the fields and saw the crop out and thrashed, they then took it away in bags. This never occurred before. They generally come round and take it after it has been housed. This time they bought the standing crop.

In such tracts have the railways and roads extended into them, had the effect of stimulating the export of the annual surplus production to sea-ports and to rich districts where more valuable crops are produced?—The railways have stimulated them.

When crops fail and prices go up in such tracts, is private trade ready to import freely into them?—Yes, I think so.

Can you compare recent with former famines, and say whether the different classes of people seemed this time to have more or less power of resisting destitution?—Certainly, much more.

(Mr. Holderness).—Did they come more freely on to relief works?—When they had got to the end of their reserves. They came when they were in better condition than in former famines.

(President).—So far as your information went, were food stocks large in the interior of the country, or in any particular province?—No, they were not large.

What was the general impression as to the extent to which these stocks would prove sufficient for the food requirements of the country without importation from abroad, and would be placed on the market, or held up?—I think, if I remember aright, the stock was supposed to be sufficient to last from February to April.

Were there imports made on the order of the up-country grain dealers for Burma rice or by Calcutta firms at their own risk in anticipation of the demand of up-country dealers?—I ordered the supply from Gillanders, Arbutnot & Co., and they ordered it from Rangoon. There was only one man, besides, a Bengali, who got some. I cannot say how.

Was there any objection to the Burma rice?—No. They said it was not as good to eat, but I don't think they minded if they were hungry.

The continuance of a very high level of prices all over India is a very serious curse to the country, is it not?—Undoubtedly.

Do you think it possible for Government to take any action that would mitigate such a state of things?—I mean any action which would tend to lower prices in India, or must it be left entirely to private trade?—Entirely to private trade, I should think.

(Mr. Holderness).—Such prices occur only during scarcity, do they not?—Yes.

(President).—Do you think that Government might have imported Indian corn from America?—I think so, to ensure there being a reserve, but not to undersell the business.

Supposing Government had bought a large amount of corn from America and put it into the market, or kept it in reserve at ports, do you think that would have given the people confidence and lowered prices in the country generally?—I think a little.

(Mr. Holderness).—What effect would the knowledge that Government had a large reserve have had on trade?—No effect, if they had confidence that Government would not undersell them. If they thought that Government would undersell them that would affect them.

Would they believe in the promises of Government?—I don't think so. In 1866 nothing was done till very late; in 1874 grain was practically thrown at them. That accounted for the want of confidence this time. They thought Government would have done the same thing they did in 1874.

What were the rates in Behar?—As far as I can make out, the prices of Burma rice in Behar were not very much higher than allowed of a fair trading profit.

Government could not have reduced prices by buying in the Rangoon market and laying the grain in Behar?—No. If Government bought from Burma, and sold under the prices ruling here, nobody would buy from bunniah.

(President).—If Government imported and notified that they were importing for relief works and poor-houses only, and that they would not otherwise put the grain on the market, would that interfere with private trade?—If you pay them on relief works, then it enters into competition with the bunniah.

MR. W. MAUDS, Magistrate and Collector of Mozufferpore, called in and examined.

I put in a written statement of evidence.

Vide paragraph 4 of Mr. McIntosh's letter No. 42, dated 12th January 1898.

(a) DEPARTURES FROM THE BENGAL FAMINE CODE.

Broadly speaking, the famine work as carried on with Government funds was done in accordance with the provisions of the Famine Code. The few points in which that Code appears to have been departed from are noted below.

1. Section 5: Programmes of works.—Programmes of small works practically useless as they give way to present necessities when famine actually arises.

2. Sections 17 and 18: Works to be carried on by District Boards.—Not really given effect to during the present famine. All control was at a very early stage taken away from District Boards and Municipalities.

3. Section 30: Circles to be coterminous with thannas.—The factory *Dehats* were found a more convenient basis of organisation for circles, and the sub-

divisional and thannah boundaries were in places broken through.

4. Section 33: Circle Inspector (charge Superintendent) to submit reports.—Only sub-divisional officers submitted half-monthly reports to district officers and charge superintendents of course sent in returns weekly.

5. Section 35: Contractors for grain.—Contractors were not generally specifically appointed.

6. Chapter IV says nothing about charge superintendents who were the mainstay of the whole work in this district.

7. Section 41: Relief to whom to be given.—Carried out as far as possible, but the line between able-bodied and non-able-bodied persons is very difficult to draw.

8. Section 43A: Grain doles preferable to money doles.—Infringed at first, but afterwards only grain doles

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Mr. W.
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Maude.
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1898.

were given except in the town of Mozufferpore where, for special reasons, money doles were allowed.

9. *Section 43B: Relief to respectable women.*—The great majority of gratuitous relief was given to persons who were in no way debarred from coming for it, and hence it was not, except in a comparatively very few cases, given at the homes. In cases of *parda nishins* where it had to be so given, attempts were at once made to intercept it, if possible, by unscrupulous agents.

10. *Section 45: Work in return for gratuitous relief.*—It was found that the work that could be extracted was only nominal, expensive, and troublesome, and the attempt to exact it was subsequently in most cases dropped.

11. *Section 53: Classification of works.*—No distinction was made between large and small works, but practically most of the Public Works Department works were large and the civil agency small.

12. *Section 55(2): Tanks preferable to roads.*—In Sitamarhi Sub-Division tanks were not much used to any extent except in the north-east corner where the Darbhanga Rajie-dug a number of tanks.

13. *Section 55(3): Multiplication of works to be avoided.*—I doubt if this was at all properly carried out. In some places the works were very numerous, and people came at times for part of a day only. It is almost impossible to stop this.

14. *Section 57: Works in the Public Works Department Budget—how to be used as relief works.*—I don't think any works were divided in the way described in this section, although there was piece-work later on in three of the Public Works Department works.

15. *Section 61: Allowance before commencing work.*—Not found necessary.

16. *Section 62: Classification of labourers.*—Much too elaborate. In practice there were only two classes, B and D.

17. *Section 72.*—Drafting of labourers not found necessary.

18. *Section 86.*—Work officers sent only the returns of numbers and weekly post-cards.

19. *Section 124, et seq: Rules for kitchens.*—Details far too minute. The provisions as to kitchens were kept in the spirit but not in the letter.

20. *Section 141: Relief to respectable men, weavers, etc.*—Practically inoperative here.

Sections 143—147.—Practically inoperative here.

Cattle and forests { 21. chapters XI and XII not used here.
22. chapter XIII ditto.

23. *Section 168(3).*—Not carried out.

24. *Section 185: Accounts.*—Much confusion at first among the untrained charge superintendents who could not understand the system of distributing permanent advances to their subordinates out of their own permanent advance.

25. *Sections 196-199.*—Inoperative here.

(b) SUCCESS ATTENDING THE MEASURES, ETC.

The Famine Commission standard of 15 per cent. was not nearly reached. The percentages on population were highest in May and June. In June the workers reached 2.69 per cent. and in May the gratuitous relief recipients reached 3.35 per cent. or together only 6.04 per cent., while the average for the whole period of famine was only 1.37 for workers and 2.20 for recipients of gratuitous relief or 3.57 altogether.

I think the amount of relief given was adequate, but not, generally speaking, more than was necessary to prevent loss of life or severe suffering. Judged by the mortality, the relief was amply sufficient. Practically the whole district was affected, and the district death-rate, from October 1896 to September 1897 inclusive, was only 30.53 against 47.90 in the preceding year and 38.28 on the average of the five years ending 30th September 1895. Registration of births and deaths has been carefully attended to in the Mozufferpur district, and considerable reliance can be put on the rates quoted above.

The total cost on relief was Rs15,02,604, of which Rs6,55,480 represented labour wages and Rs5,23,240 gratuitous doles.

The numbers relieved were 18,989,251 in terms of units for one day, being 7,636,084 workers and 11,353,167

recipients of gratuitous relief. The cost per head per diem amounted to 1½ annas. I have no figures about previous famines.

As far as possible the labour test was applied to all persons judged capable of doing any work, including healthy women and children. The conditions of the task and wage were such as to constitute a real test of necessity.

The distance test was not imposed and the labourers did not live on the works. I do not think that the people came to the works more largely than in former famines.

Home relief, i.e., relief in the houses, was very little resorted to. Suspensions and remissions of Land Revenue were not given.

I do not think that any class has been permanently injured.

(c) AND (d) ADVICE FOR FUTURE.

I have nothing under this head to add to my 862 F.R. dated 6th January 1898, reporting on Mr. Higham's suggestions.

(President).—You have been Collector of two districts, have you not?—Yes, I was Collector of Pubna from November 1896 to June 1897, and then Collector of Mozufferpore to the end of the famine.

Was any relief required in Pubna?—Yes, a certain amount.

What form did it take?—Entirely in the form of test works, strictly in accordance with the Famine Code.

It was not thought necessary to introduce relief works, was it?—They were called test works up to the time I left the district.

In Mozufferpore there was considerable relief?—Yes, a large amount.

Was it given in the form of relief works and gratuitous relief?—Yes, and also relief from the Charitable Relief Fund.

Were there any kitchens and poor-houses?—Yes.

You say in your written note of evidence that programmes of small works are practically useless, as they give way to present necessities when famine actually arises. What were you thinking of in making that answer?—I was thinking of the list of small works made up year by year and submitted to Government. I think that when famine actually commences the necessity of adhering strictly to such works is not observed. Tanks were made on land that we got for nothing. I imagine that if the programme were compared with the smaller works actually carried out, it would be found that very few of the works on the programme had been adopted.

You say that tanks were made on land that you could get for nothing, were these useful tanks?—Yes, the villagers were excessively keen on getting tanks made in their villages.

If you asked the same people for a site at a time when there was no scarcity, you would be refused?—I think not. If you undertook to make a tank they would give it readily at any time.

Is the gist of your remark that the programme has not been made in a very practical spirit, or what was it you meant?—I mean it is no use making a programme. When circumstances arise other works will be found necessary that were not thought of at the time and regarding which we have no information. Therefore the original programme is so much waste of paper.

(Mr. Bourdillon).—That objection does not apply to large works, does it?—No, entirely to small works.

(President).—You say that sections 17 and 18 of the Local Code were not really given effect to during the present famine. All control was at a very early stage taken away from District Boards and Municipalities. Do you think that was necessary?—That remark applies entirely to Mozufferpore but not to Pubna where there were only five small works and the rule worked excellently. In Mozufferpore I doubt if the works could have been done as well under the District Boards as under Government.

You say the factory Dehats were found more convenient bases of organization for circles, and the sub-divisional and thannah boundaries were in places broken through. That I suppose applies to districts where indigo planters are numerous?—Yes.

You say that only sub-divisional officers submitted half-monthly reports to District officers, and Circle Officers and Charge Superintendents sent in returns weekly. A Charge Superintendent is the same thing as a circle inspector, is he not?—Practically; the Charge Superintendent and Circle Officers took the place of the Circle Inspectors mentioned in the Codes.

The sub-divisional officer was assistant to the Collector?—Yes.

How many Charge Superintendents had he under him?—There were 5 Charge Superintendents in the Kitamahi sub-division, 4 in the Sadar and 2 in the Hazipur Sub-division.

Then you think it would be a waste of the circle inspector's time to send in half-monthly reports?—I think there is no necessity for his sending in detailed reports on all the subjects laid down in the Code.

Was the sub-divisional officer in sufficiently constant communication with the Charge Superintendents to enable him to register the statistics without further reference to them?—Yes, I think so.

You say with reference to section 35 of the Local Code that contractors for grain were not generally specifically appointed. What do you mean by "specifically"?—As a matter of fact I don't know of any contractors having been regularly appointed for the supply of grain. Supplies were got from the local bazars.

On relief works did not officers in charge make arrangements with grain dealers to open a sort of market, or did they leave the thing entirely alone?—I am not sure about that in Mozufferpore. I have permission was given to certain *Dunnahs* to come and open shops at the works.

Was the Circle Inspector under the Charge Superintendent?—The Circle Officer had direct control of gratuitous relief in so many villages. The Charge Superintendent would have ten or twelve circle officers under him.

You think that the Charge Superintendent is a necessary link?—Yes, I think he should be introduced into the Code.

You say that section 41 of the Local Code was carried out as far as possible, but the line between able-bodied and non-able-bodied persons is very difficult to draw. You are speaking of gratuitous relief?—Yes. One could always find one or two persons who would be able to work. It is a great deal a matter of opinion.

Was the man then generally told to go to the relief works?—Yes.

When it was a matter of doubt, what happened. Was it given generally in the man's favour?—No, I don't think so. He was ordered off to the relief works.

Do you think the inspecting officers were in the habit of favouring some people?—I think there was some slight tendency to keep able-bodied persons on gratuitous relief; also many became fit to do work and then arose the question of how soon they should be turned off.

(Mr. Bourdillon).—When you say able-bodied you don't mean that they were in good condition, do you?—I mean able to do some work.

(President).—These doubtful people you spoke of. What proportion do you think they bore to the mass who got gratuitous relief?—It is a difficult question to answer. Perhaps 3 or 4 per cent.

You are talking of gratuitous relief in the villages?—At village centres.

You say that section 43A was infringed at first, but afterwards only grain doles were given, except in the town of Mozufferpore, where, for special reasons, money doles were allowed. What were those special reasons?—The first was that supplies were all easily available, and the second that gratuitous relief was given in Mozufferpore from the Charitable Relief Fund, and it was given by committees of private gentlemen who found it more convenient to distribute money.

Do you approve of the principle of the Code that grain should be given rather than money?—Yes, certainly. In the Government relief money was given up to February, after that grain was given universally.

You say that in the case of the distribution of gratuitous relief to *parda nashins* attempts were made to intercept it, if possible, by unscrupulous agents. How was it actually distributed to *parda nashins* at their houses?—Chiefly by *chowkidars*.

These were I suppose then the unscrupulous agents?—Yes, some of them.

I suppose the *chowkidar* did not actually hand it to the *parda nashin*, did he, rather to somebody representing her?—I suppose so.

So there was another opening for theft?—Yes. What I had in my mind was that two or three *chowkidars* were actually caught misappropriating the doles.

Besides these two or three cases did you hear whether there were numerous complaints on the subject?—No.

On the whole, you think, the money given to *parda nashins* did reach the persons it was intended for?—Yes, I think so, on the whole.

You think that the attempt to get work from persons receiving gratuitous relief was rightly dropped, do you?—Yes, I think so. It was not worth the trouble and expense.

You say that in some places the works were very numerous, and that people came at times for part of a day only. You think it would not have been possible to prevent this?—I think it would have been possible if there had been fewer and larger works, at a greater distance apart. As it was, the people selected the works they wished to go to. Of course they went to the worst managed works.

Were the works in question managed on the task or piece-work system?—On the task-work system.

You refer to the whole of the district of Mozufferpore, do you not, or to parts?—To the whole.

Do you think that any people came to the works who were not driven there by real necessity?—No, I don't think it went as far as that. I think they would probably all have gone if there had been only larger works further off.

Did those who came for a part of the day, do a full task and take away the wage?—In many cases they did practically nothing and took away the minimum wage.

In practice had they to come in the morning or at any time?—I think they were supposed to come in the morning.

(Mr. Bourdillon).—The muster rolls are generally taken from 8 to 9 in the morning?—Yes.

(President).—You say that allowance before commencing work was not found necessary?—As a matter of fact, if people came late in the day they were admitted the next day.

Does not that show that the people were not in very great distress?—Yes, it would seem to show that.

(Mr. Bourdillon).—It showed that they had not come from very far?—Yes, and that they had not come starving.

(President).—You say with reference to classification of labourers that there were only two classes, B and D?—Yes.

You think the Code classification much too refined?—I think it too refined to be easily workable.

I suppose professional diggers did, as a matter of fact, attend these works to a great extent?—I don't think so, except when piece-work was introduced.

That meant, I suppose, that there was a good deal of private employment going on?—Yes.

It also meant that able-bodied persons not accustomed to labour came very little on to the works?—All the people who came were accustomed to labour.

(Mr. Bourdillon).—So long as there was private employment they would do better elsewhere?—Yes.

(President).—You say that sections 141 and 143 to 147 were practically inoperative?—Yes, I suppose there were hardly any, if any, of that class of people (weavers, etc.) on our works.

Was that the reason?—I mean that all our relief was in the form of actual remuneration for work done.

You say, with reference to section 185, that there was much confusion at first among the untrained Charge Superintendents who could not understand the system of distributing permanent advances to their subordinates out of their own permanent advance. Eventually did the system work well?—Yes, I think so.

Have you any suggestions for improving or simplifying it?—No, I think the system of accounts worked well when it got into order.

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How were the mortality returns collected in Mozufferpore; through what agent?—Through the Police.

Did the chowkidars bring in returns?—Yes, to the thannah.

Is it your impression that they are reasonably accurate?—I think they are particularly accurate in Mozufferpore just now. The District Superintendent of Police has paid great attention to the matter.

(Dr. Richardson).—Has the chowkidar got a register?—In Pabna he had not, in Mozufferpur he has.

The mohurrir at the thannah writes it into the chowkidar's book, I believe?—Any literate person in the village writes it.

(President).—The chowkidar knows everybody and so is not likely to overlook a death in his village, but in the case of outside people, would he report them?—I think so. He is bound to know about it.

If he did report a death from starvation he would have to go off expressly and report it, I suppose?—I suppose so.

Then the sub-inspector would have to go and enquire, would he not?—Yes, certainly.

A good deal of trouble would be involved to both parties?—Yes.

Would they prefer not to report it then?—I think it is quite possible they would prefer not to report it.

(Mr. Holderness).—Have you circle officers everywhere?—Yes.

Would a death from starvation be likely to occur without the circle officer hearing of it?—I don't think so. The people would themselves bring it to his notice.

(President).—There was only one death from starvation in your district?—That is all we know of.

(Mr. Bourdillon).—Is it not the case that villagers take care to report deaths that occur, as that would mean bringing gratuitous relief to the village?—I don't know.

(President).—Your general impression is that statistics are correct and that only one man, or at any rate, that not many more than one man died?—I think so.

(Mr. Holderness).—The death-rate was not above the normal, was it?—Very much below.

(Dr. Richardson).—Many of the old and weakly people would have died in the previous year, leaving only a few to die the following year. Would not that account for the small number?—No doubt it would to some extent.

(Mr. Holderness).—Do you think that some of the people on gratuitous relief fared better than they would in ordinary times?—I think so. It kept many of the old and feeble alive who would not have survived in ordinary years.

Was there any wandering among the people?—None on a big scale.

The poor-house population was small, was it not?—Yes.

If there had been much wandering the poor-house population would have risen?—Yes, only a small percentage of them came from distant parts.

(President).—Whom did the poor-house population consist of?—As far as I could say, the poor-house population was fed from the beggar class. We had poor-houses at Hazipur, Mozufferpore, and Sitamarhi.

They came when private charity dried up?—Yes, and they were then forced into the poor-houses.

(Mr. Bourdillon).—Had you a large number of sick persons in the poor-houses?—Yes.

(President).—Do you think the poor-houses were so disliked that so long as a beggar could get a bare subsistence he would prefer to get along in that way?—He would undoubtedly.

(Mr. Holderness).—You had a large number of people on gratuitous relief getting cooked food towards the end of the famine?—I should say not many. They were principally children.

Were the children struck off the gratuitous dole list and put on to kitchens?—Yes.

Suppose there was a widow with two children who had been previously in receipt of doles, when you started the kitchens, did you strike them off the list and put them on the kitchens?—Yes.

And the woman would receive a dole for herself only?—Yes.

Do you think kitchens a useful form of relief?—Certainly. For children they are quite the best.

Throughout the famine?—Yes. The sooner they are started the better.

In other cases, besides children, would you send them there?—I would send other people if they would go, but they won't go.

Would you say "either go to the kitchen or go off"?—You cannot say that.

Not to any class?—It would be very hard to distinguish.

Were most of your relief works tanks?—I think the majority were roads.

Which is the best, a tank or road?—I prefer tanks myself, as long as they can be worked.

Is tank work more popular with the people?—No. I don't think so, as far as the actual work is concerned. It is more popular in this way that the zamindars will more or less urge the people to go to a tank, but will not urge them to go to road-work, because they want the tank.

So they might attract labour?—Yes.

Is there still ample road-work in your district?—Yes, I think so; we have a great many miles of *katcha* roads which always have to be kept up.

Were most of your works under Civil or Professional Agency?—The greater part was under Civil Agency.

Would you prefer them under Public Works Agency?—I think in the case of a future famine of the same extent, or more severe, I should place the whole of the works under the Public Works.

You are in favour of larger works?—Yes.

Would you keep the small works also?—It is a difficult thing to say, not if I could help it, I prefer larger works.

Did you give a minimum wage if a man did not do his full task?—Yes, with a few exceptions.

Did you try piece-work?—Yes.

(Mr. Bourdillon).—Do you mean minimum or a penal wage?—I mean penal.

(Mr. Holderness).—Were the people content to take a penal wage?—Not on the whole.

Would you prefer piece-work generally?—Personally I am opposed to piece-work.

Why?—I think it has a tendency to get into the hands of petty contractors. You cannot guarantee that all the persons who need work will really be admitted.

Was the work under Public Works or Civil Agency?—Under Public Works.

(Mr. Bourdillon).—Mr. Macnaghten told us that more roads had been repaired and improved than the District Board could keep up. Is that your opinion too?—It is a question of efficiency. I don't think that all the roads can be kept up in a perfect state of order.

(Mr. Bose).—Should not relief at a kitchen be made compulsory in the case of people of low caste who could not under the caste rules object to take cooked food at such a place?—It is very difficult to draw the line as to who may be compelled and who may not. You cannot lay down who will lose caste according to the practice of the district.

As regards the administration of relief from the charity fund to *parda* women, could it not have been managed through the agency of committees of respectable persons in the villages instead of through that of the chowkidars?—I think in practice it would be found to be very difficult.

(Mr. Higham).—What was the proportion of labourers on Civil Works to Public Works?—The proportion of workers on Public Works to those on Civil Works Agency in the Mozufferpore District was about 20 per cent.

Had you any District Engineer on your establishment to look after Civil works?—No, we had no District Engineer. The District Engineer had nothing to do with famine works.

Who looked after them?—The works officers under the Charge Superintendents.

Could you have done without Public Works establishment?—Yes, by increasing the Civil Agency offices.

They only supervised one-fifth of your relief works?—Circumstances prevented the Public Works coming in till late and then they had only one-fifth of the relief works to look after.

The Public Works was simply employed on starting new works? Yes, and also on the repair of roads.

Would you have found it difficult to run the works yourself?—I think it could have been done.

Mr. W. Maude.

Had you any piece-work on the Civil Agency works?—No.

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What is your opinion of piece-work?—I am opposed to piece-work. I should prefer task-work. With piece-work you cannot guarantee that all labour will be accepted.

SURGEON-MAJOR F. S. PECK, Civil Surgeon of Mozufferpore, called in and examined.

I put in a written statement of evidence and written answers to the Commission's questions.

1. All medical subordinates employed on relief works and in famine circles should be provided with horse allowance and *ekkas* for the carriage of their medicine chests; without these their utility is much lessened on account of the time wasted in getting from place to place.

2. Each relief work should, in my opinion, be a centre of gratuitous relief and should be provided with a kitchen for the issue of cooked food, both to be under the charge of the officer in charge of the relief work.

3. All doles of grain should consist of a due proportion of rice or *makai* and a nitrogenous pulse. *Marwa* should not be issued and *makai* becomes weevil eaten and unfit for food after the 1st of April. In some circles I had occasion to stop the issue of doles consisting solely of grain, as consumption of this grain by itself must inevitably produce indigestion and bowel-complaints.

Written Answers to the Commission's Questions by Surgeon-Major F. S. Peck, Civil Surgeon of Mozufferpore.

*17. No.

85. I consider piece-work to be on the whole infinitely better suited to the conditions under which famine relief works are carried on. Piece-work is the normal procedure in this country and is better understood and appreciated by the labouring classes than task.

98. Eight years of age.

103. Yes.

120. Most certainly a system of dual control is dangerous to a degree; under such a system there is always a risk of starving people being banded about backwards and forwards from work to relief, from relief to work and not getting either.

180-I. No.

180-II. Yes.

184. Yes.

198. The distribution of cooked food is the only satisfactory way of relieving distress amongst children.

The issue of money doles to the parents is useless amongst the lower castes.

248. The annexed statement gives the ratio of deaths per thousand of population in the famine area in the Mozufferpore District during 1891 to 1895 and also in 1896 and 1897.

250. I attribute the low mortality to the favourable climatic conditions of the year. Undoubtedly thousands were saved from starvation by the measures adopted.

251. The favourable climatic conditions and the absence of cholera account for a low death-rate, but I expect a very high mortality in the coming year amongst those whose constitutions have been debilitated by privation.

254. The scale of diet was not sufficient and some alterations are suggested as per annexed statement.

255. It is impossible to estimate the number of deaths indirectly due or accelerated by privation.

Sur.-Maj. F. S. Peck.

256. One actual case of death from starvation came under observation. It was a *post-mortem* case sent in by the Police on the 15th of February 1897.

31st Jan. 1896.

257-I. No.

257-II. No.

257-III. Yes.

258. Yes.

260. Increase in both due to improved registration.

Year.	Birth-rate.	Death-rate.
1886		13.24
1887		12.53
1888		15.29
1889		16.02
1890		22.73
1891		22.31
1892	33.54	40.03
1893	36.55	29.61
1894	34.60	44.25
1895	36.47	32.56
1896	40.17	46.70
1897	34.16	32.04

No real evidence of increase or decrease.

271. No.

273. In country in winter, rice, *makai*, *marua*, *kodo*, *sanwan*, *kowni*, *atuwa* and *suthni*, and in summer, rice, *jao* and *khesari*, *boot*, *mutter*, *rahar* and wheat to some extent.

In town the same (quantity 10 or 11 chattaacks for one meal).

274. Ordinarily three meals, one in the morning called *jalkhai* or *basia*, one about noon and one little after sunset; each meal consists of cooked rice, *kodo* or *sanwan* or bread of *makai*, *marua* and pulse and seldom milk.

275. *Jao* and *khesari*, *kerao mutter*, *boot*, *rahar*, *sanwan*, *kowni*, *marua*, *alua* and *suthni*.

276. *Jao* and *kesari*.

277. *Khesari* eaten in any quantity produces a species of paralysis which is very common in this district.

278. Cooked rice, dal and vegetables.

279. Three meals, and they consisted of cooked rice, dal and vegetables.

280. There were general complaints of meals being insufficient.

281. The diet given at famine relief, poor-houses and kitchens was insufficient as compared with the scale of labouring prison diet.

* The numbers refer to the questions drawn up by the Commission.

Sur-Maj.
F. S. Peck.
31st Jan.
1898.

As to the mortality during the famine period.—Q. 248.

Famine area or circles.	RATIO OF DEATHS PER THOUSAND OF POPULATION IN							Names of Civil Hospital Assistants and Native Doctors deputed to famine duty in the areas.	Number of cases treated by each.	REMARKS.	
	1891.	1892.	1893.	1894.	1895.	1896.	1897.				
Mozuffarpore Town	20.14	51.77	34.35	43.72	31.73	42.28	30.00	Civil Hospital Assistant Najeeb Khan in addition to his own duty.	106	Shown in his Dispensary Return.	
Sitamarhi "	19.85	42.79	27.30	32.70	29.37	49.91	41.19	Civil Hospital Assistant Shashi Bhusan Roy in addition to his own duty.	190		
Hajipur . "	31.04	50.12	39.88	55.14	35.23	45.88	35.32	Civil Hospital Assistant Sasi Mohan Dass in addition to his own duty.	...		
Lalgunge "	34.97	59.31	44.42	58.67	34.49	52.82	34.49				
Mozuffarpore Thannah	19.85	33.91	32.68	44.53	36.10	41.75	34.75	Native Doctor Ishan Ch. Dey	293		
Paru "	23.32	39.87	30.95	51.84	42.21	49.85	38.89	Ditto Perionath Bose	519		
								Civil Hospital Assistant Nekhil Ch. Bhattacharjee	506		
								Ditto ditto Khedum Ali	111		
								Ditto ditto Fuzlur Rahman	390		
								Ditto ditto Mohamed Abdul Huq	95		
Kalia "	19.98	36.77	24.46	33.62	26.81	44.65	31.61	Native Doctor Ram Charan Dass Gupta	87		
Sitamarhi "	25.34	44.67	28.72	43.17	33.15	52.94	26.17				
Belsand "	21.87	35.83	24.28	34.35	26.15	46.75	31.12	Civil Hospital Assistant Man Mohan Bystab	309		
								Native Doctor Sri Nath Dass	128		
								Ditto Golam Punjalan	150		
								Civil Hospital Assistant Chunder Kumar Gupta	38		
								Native Doctor Bisseswar Samanto	140		
Pupri "	19.92	38.49	23.40	32.48	26.87	54.33	26.63	Ditto Chundi Charan Chatterjee	1109		
Shinhar "	14.12	28.74	19.72	27.22	22.54	41.86	31.72	Civil Hospital Assistant Hari Bhundhu Dass Gupta	101		
								Native Doctor Sheo Narain Bajpai	960		
Hajipur "	23.33	36.52	30.17	50.43	31.16	46.26	31.69	Ditto Akhoy Kumar Sircar	352		
Mahuwa "	25.89	37.24	35.16	55.99	33.31	42.87	30.99	Ditto Nabo Gopal Bose	524		
Lalgunge "	30.03	47.79	41.14	60.80	36.51	50.49	33.23				
Total death-rate of the District	22.31	40.03	29.81	44.25	32.56	46.70	32.04				
			Average of preceding 6 years is 35.62								
Total birth-rate of the District	33.54	36.55	34.60	36.47	40.17	34.16	TOTAL	6,108		

MINUTES OF EVIDENCE

F. S. PECK, SURGN.-MAJOR,
Civil Surgeon of Mozufferpore.

Statement showing comparative scales of diet, vide Answer to Question 254.

SCALE OF DIET PRESCRIBED IN THE FAMINE CODE, SECTIONS 98, 99 AND 100.				NON-LABOURING DIET PRESCRIBED FOR PRISONERS IN THE JAIL.			SUGGESTED SCALE OF DIET.								
Articles.	For a man.		For a woman.		REMARKS.	Articles.	For native of Bihar or A.-W. P. and Punjab		REMARKS.	Articles.	Quantity.		REMARKS.		
	Srs.	ch.	Srs.	ch.			Srs.	ch.			Srs.	ch.			
<i>Full ration for able-bodied labourers.</i>					98. Full rations prescribed to maintain able-bodied labourers in health and strength. For big children half the rations for a man: for small children, $\frac{1}{2}$ of those rations.	Rice	10	99. For children half and quarter rations as above.	<i>For adult labouring class.</i>			Minimum ration for females: rice may be reduced to 9 chittacks.		
Flour of the common grain used in the country or cleaned rice	12	...	10		Dal	2		Rice	10		For females rice may be reduced to 8 chittacks.	
Pulse	$\frac{1}{2}$...	$\frac{1}{2}$		Vegetable	3		Dal	2			
Salt	$\frac{1}{4}$...	$\frac{1}{4}$		Oil	$\frac{1}{4}$		Vegetable	3			
Ghee or oil	$\frac{1}{4}$...	$\frac{1}{4}$		Salt	$\frac{1}{4}$		Salt	$\frac{1}{4}$			
Condiments and vegetable	$\frac{1}{4}$...	$\frac{1}{4}$		Condiments	$\frac{1}{4}$		Ghee or oil	$\frac{1}{4}$			
<i>The minimum ration for labourers.</i>						Rice	8		Condiments	$\frac{1}{4}$			For females rice may be reduced to 10 chittacks.
Flour of the common grain used in the country or cleaned rice	8	...	7		Tamarind	$\frac{1}{4}$		Firewood	8			
Pulse	1	...	$\frac{1}{2}$		Firewood	8		<i>For adult non-labouring class.</i>					
Salt	$\frac{1}{4}$...	$\frac{1}{4}$		Rice	9		Rice	9			
Ghee or oil	$\frac{1}{4}$	...	$\frac{1}{4}$	Dal . . . . .	...	2	Dal . . . . .	...	2		
Condiments and vegetables	$\frac{1}{4}$	...	$\frac{1}{4}$	Vegetable . . . . .	...	2	Vegetable . . . . .	...	2		
<i>The penal ration for labourers refusing to work.</i>					Rice . . . . .	...	7	Salt . . . . .	...	$\frac{1}{4}$			
Flour, grain or rice	7	...	6	Salt . . . . .	...	$\frac{1}{4}$	Ghee or oil . . . . .	...	$\frac{1}{4}$			
Pulse	$\frac{1}{4}$	...	$\frac{1}{4}$	Condiments . . . . .	...	$\frac{1}{4}$	Condiments . . . . .	...	$\frac{1}{4}$		
Salt	$\frac{1}{4}$	...	$\frac{1}{4}$	Fuel . . . . .	...	8	Fuel . . . . .	...	8		
					Rice . . . . .	...	11	<i>Full ration for labouring able-bodied class.</i>						
					Dal . . . . .	...	2	Rice . . . . .	...	11			
					Vegetable . . . . .	...	4	Dal . . . . .	...	2			
					Salt . . . . .	...	$\frac{1}{4}$	Vegetable . . . . .	...	4			
					Ghee or oil . . . . .	...	$\frac{1}{4}$	Salt . . . . .	...	$\frac{1}{4}$			
					Condiments . . . . .	...	$\frac{1}{4}$	Ghee or oil . . . . .	...	$\frac{1}{4}$			
					Fuel . . . . .	...	10	Condiments . . . . .	...	$\frac{1}{4}$			
								Fuel . . . . .	...	10				

NOTE—Children below 14 and above 9 years, half of these rations. Camp Hospital patients are to be allowed extras in the shape of milk, mango, sugar and meat if possible according to the direction of the medical officer. When rice is objectionable one meal may be given of bread (flour of the common grain) in place of rice, but it should be given little less than the quantity of rice allowed and the second meal to consist of rice.

MOZUFFERPORE ;
The 28th January 1898. }

F. S. PECK, SURGN.-MAJOR,
Civil Surgeon.

Surg-Maj.
F. S. Peck.
31st Jan.
1898.

Sur.-Maj.
F. S. Peck.

31st Jan.
1898.

(President).—You are Civil Surgeon of Mozufferpore?—Yes.

How long have you been in that place?—I have been in Mozufferpore for 10 years.

What is your answer to question 17?—My answer is no.

What is your opinion with reference to task and piece-work?—Piece-work is better understood and appreciated by the labouring classes in this country.

You did not have the supervision either of task-work or piece-work, I suppose?—No.

You do not think there is any danger involved in the piece-work system of the weaker men and women being excluded from relief?—Not when piece-work is given out in small enough quantities. If given out as a family job, there is little danger of the weaker members being excluded in my opinion.

In what way did the task-work ultimately fail?—Families did not always succeed in getting together, and they objected very much to this. Giving out small bits of piece-work enables a man to keep his family together.

What do you consider the minimum age at which children should be employed as workers?—Eight years.

Are you in favour of paying a wage on Sundays?—Yes, I should pay a wage on that day without any work.

(Mr. Holderness).—That would be more liberal?—Yes.

(President).—Do you think that the officers of the Public Works Department who are responsible for the execution and inspection of relief works, can or should also undertake the control of all other matters within the relief camp, such as the payment of labour, the conservancy arrangements, the management of kitchens, bazar arrangements, etc.?—I consider any system of dual control extremely dangerous, there is always a danger of starving people being handed about backwards and forwards from relief works to gratuitous relief and getting neither.

As regards conservancy arrangements, what arrangements were there in connection with the famine relief?—My arrangements were these. First, the medical subordinate on the works was held responsible for the quality of the food supplied. He also had to be responsible for the water-supply and for the disinfection of all wells, and, thirdly, for the conservancy arrangements.

(Mr. Holderness).—Was there a medical subordinate on all works?—All big works.

What was he?—Hospital Assistant.

(President).—Were you occupied with the hospital at Head-Quarters, or did you look about into the district?—I inspected nearly every work in the district.

I understand that in your absence the Public Works officer in charge of the work had the control over the Hospital Assistants?—I placed my Hospital Assistants entirely under the charge of the Circle Inspectors. I considered that was the only satisfactory way.

Is the poor-house ration prescribed by the Famine Code sufficient? Had the dietary to be varied in the case of weak and sickly persons?—No.

What is the ration prescribed by the Bengal Famine Code?—Eight chattaks rice, 1 chattak of dal, $\frac{1}{4}$ th of salt, $\frac{1}{2}$ th of ghee, and $\frac{1}{2}$ condiment and vegetable.

That is the minimum ration?—That is the minimum ration.

Do you think that is defective?—The quantity of rice is hardly sufficient, the quantity of nitrogenous pulses I considered half of what it ought to be, and the allowances for vegetables perfectly absurd.

Had any compulsion to be used to detain persons in the poor-houses? Were the inmates free to leave when they chose?—Yes.

Were the departures or escapes numerous?—There were a good many.

To what do you attribute the cause?—Nobody would enter poor-houses except professional mendicants.

(Mr. Bourdillon).—Respectable people would not look at it?—No.

(President).—From the physical condition of the persons entering the poor-houses and the distances they had come, what opinion did you form as to the severity of

the famine, and the degree to which it had broken up households and caused wandering?—In the Mozufferpore District, of which only I had experience, I should not consider the famine was very severe.

What do you say with regard to relief kitchens?—The distribution of cooked food was the only satisfactory way of dealing with children.

Do you think the parents keep the children's grain dole and do not feed the children?—In a great many cases.

Amongst the lower classes or amongst the higher classes?—Amongst the lower classes. I feel rather strongly on that point because I saw a lot of relief going on in grain doles. There is no objection whatever to letting their children get food from the kitchen.

(Dr. Richardson).—Were there many emaciated children?—In some parts I saw a lot of emaciated children.

(Mr. Holderness).—In what part of the famine?—About August.

Did they freely send their children to the kitchens under a certain age?—I think they did.

Would the parents continue to get doles under your proposal to feed children at kitchens?—If the distress were really very severe they would all come to kitchens, and that is the best way for feeding them.

You did not reach that point in Mozufferpore?—No.

(President).—What was the ratio of deaths per thousand of population in the famine area of your district for the five-year period 1891—95 preceding the famine?—What was this ratio during 1896 and 1897?—The average is 38.28 and the ratio in 1897, 32.04 per mille.

Do you consider the mortality returns of Mozufferpore are reliable?—I think they are more reliable than in most districts. The returns for the last three years are very good.

If in spite of the privations consequent on scarcity of food, there has been little or no increase in the ratio of mortality, do you attribute this result entirely to the success with which the distress has been met by relief measures?—I attribute the low mortality to the favourable climatic conditions of the year, but undoubtedly thousands were saved from starvation by the measures adopted.

In dry years, unaccompanied by scarcity, the health of the people, it is believed, is ordinarily very good and the mortality abnormally low. The year 1896 was an exceptionally dry year, and as a consequence the mortality would presumably, under ordinary circumstances, have been below the average; would it not seem reasonable to attribute to causes connected with scarcity, not only all mortality in excess of the normal death-rate, but also the difference between the abnormally low death-rate of a year of light scanty rainfall and the normal death-rate of years of ordinary rainfall? Would not the compensating influence on the public health resulting from exceptional dryness of season tend to mask the full effects of scarcity of food?—The favourable climatic conditions as well as the absence of cholera account for the low death-rate; but I expect a very high mortality in the coming year amongst those who have been debilitated by privations.

Do you consider the diet supplied to the different classes of relief workers, to the poor-house inmates and to those fed at the kitchens, to have been sufficient to maintain the recipients in health? Would you, as a result of your own observations, suggest any alteration in the scale of diet laid down in the Famine Code?—The scale of diet was insufficient and alterations have been suggested by me.

Of the deaths due to starvation, how many can you enumerate which could have been prevented by the timely intervention of the State? Explain, if you can how in these cases the relief measures adopted by the State failed in saving life?—Only one actual case of death from starvation came under my observation.

Was that a wanderer or a mendicant?—He was a beggar.

Were, in your opinion, the measures of State relief defective either in principle or in their working? Do you think the mortality amongst the people in receipt of State aid was to any extent due to insanitary conditions prevailing in the relief camps, poor-houses and food kitchens and

MINUTES OF EVIDENCE

can you make any proposals with the object of securing improved sanitary conditions in future famines? Was every practicable precaution taken to provide and protect against contamination pure water supplies for relief camps and poor-houses?—No. To the second part of the question my answer is—Yes.

Was the staff of Medical Officers and hospital subordinates sufficient during the famine, and were they provided with an adequate supply of medicines and medical comforts for the use of the sick?—Yes.

Is there any evidence of a continuous increase in the birth-rate or decrease in the death-rate?—There is an apparent increase in the population due really to improved registration.

That is in birth-rates?—Yes, increase of population.

Have not all the censuses shown a large increase of the population?—Nothing beyond the ordinary ratio of increase.

(Mr. Bourdillon).—Anything outside that is due to improved enumeration?—Yes.

(President).—In England, unrestrained fecundity is confined mainly to the lower and more ignorant classes. The educated classes, with certain exceptions, exercise control and foresight with regard to the number of children they bring into the world. Is education, within a measurable period of time, likely to pervade the millions of India to such an extent as to lead them to practise similar control and provision?—No.

In the tracts liable to famine in your district, which are the food-grains ordinarily used in their homes by well-to-do labourers and artisans? Please answer separately, if necessary, for town and country and for winter and summer?—Rice, makai, kodo, marwa, alwa, jai, kesari, pulses and to a small extent wheat.

How many meals do they eat in the day, and of what eatables and drinkables does each meal ordinarily consist?—Ordinarily they eat three meals a day. A small meal in the morning; a meal in the middle of the day, and a meal at night.

If any of the ordinary food-grains happen to be unprocureable, what other grains do they sometimes substitute?—If the ordinary grains are unprocureable they eat the cheaper ones, kesari and marwa.

Of these occasional substitutes which do the people consider most and which least palatable and digestible?—Kesari and marwa are least palatable. Kesari eaten in any quantity produces a tendency towards paralysis, which is very common in the district.

What food-grains were used in poor-houses and kitchens and at relief works under your observation during the recent famine?—Rice, dal and vegetables.

How many meals a day did the people get in poor-houses and kitchens, and of what eatables and drinkables did each meal consist?—In the poor-houses they got three meals a day. A morning meal, a meal in the middle of the day, and one in the evening. In the kitchens one meal.

Of the kitchen meal do they carry away a part of it?—I think the custom varied. They eat it all I think.

What sort of complaints were made as to the kind of food or plan of meals?—The general complaint of course is that the grain is insufficient.

How does the diet given at famine relief poor-houses and kitchens compare with the authorised scale of prison diet?—The diet is very much less than the jail scale.

Have you any suggestions to make with regard to a future famine?—There are three suggestions. First as regards my subordinates. I think it is very necessary that they should all be mounted and that they should be provided with *ekkas* to carry their medicines, otherwise their time is wasted in going from place to place.

What class of people are these?—Hospital Assistants. I recommended this to the Government of India and it was sanctioned, but I found the travelling allowance did not at all do. The second suggestion I have to make is that each relief work should have attached to it a gratuitous relief centre, and it should be provided with a kitchen. The kitchen should be under the charge of the officer on that work. Because otherwise a man comes and applies for work and the officer in charge of the work may say you are not fit for work; go to gratuitous relief; he goes there. The officer who is in charge of the gratuitous relief says I think this man is fit for work. Send him back again. In fact I know one occasion on which such a case occurred. It came under my notice. If people were really starving I think this would be a very great danger.

The third suggestion is about the grain doles. All doles of grain should, I think, consist of a due proportion of starchy and nitrogenous grains respectively. I have seen a whole dole being given out in gram and the consequence is that they get dysentery. Another tin I saw makai given out when the makai season was at an end. Information ought to be taken as to what grain it is advisable to distribute at a particular time, and certain officers should be informed of that fact.

(Dr. Richardson).—You say that the vegetable allowance was altogether insufficient?—Yes. It is a very difficult matter to provide it; the way I had in my poor-houses in the sub-divisions was to supplement the diet from the jail gardens.

You could not do that all over the district?—You could not do that all over the district.

(Mr. Holderness).—The people who took the grain doles came home and cooked it?—Yes.

How many poor-houses had you?—I had six.

Did you give the prescribed poor-house ration or the one that you now propose?—I supplemented the ration very considerably by giving medical extras, and I gave a lot from my jail garden. I gave all spare vegetables to help the poor-houses. But one ought not to be under the necessity of giving the proper diet as a medical extra.

(Dr. Richardson).—Part of the ration?—Part of the ration. I had to give a lot of milk to people who were bad.

(Mr. Holderness).—You had Mellin's food sent up from Calcutta?—I had a good deal of it.

Have you any suggestion to make about the diet to relief workers?—The diet is fairly good excepting the vegetables.

Then they were paid in money?—Yes, they were paid in money.

So it does not matter?—It does not matter; they can buy vegetables. I think they should get a certain proportion of dal and a certain proportion of rice.

Do you think these people in ordinary years get as much as you give them?—I think so. In this part of the world.

Mr. G. W. DISNEY, District Engineer of Mozufferpore, called in and examined.

I put in a written statement of evidence.

At the commencement of the relief operations in this Division all work was on the task work system. Subsequently piece-work was introduced on four works, on three of which there was at once a large diminution in the number of workers, the numbers on gratuitous relief in the neighbourhood not however rising (on Section I of the Bagmati canal the number fell from 5,048 on the 20th April to 1,423 on the 25th May 1897), while on the fourth work, which had previously had an unduly large proportion of women and children, the numbers increased. A comparison of the outturn of work and of the earnings per male unit,

based on the totals of the figures of the Division, is as follows:—

	Ountura per male unit.	Earnings per male unit.		
		Ra.	A.	P.
Task-work	52 cub. feet	0	1	6
Piece-work	62 „	0	2	2

Mr. G. Disney,
31st Ja
1898.

Unless famine has become very severe, I am of opinion that it can best be combatted by large works on the piece-work system for A class labour, which will tend to keep the able-bodied men at their homes, instead of straying off to other districts in search of work, and leaving their

MINUTES OF EVIDENCE

men and children to be provided for. These large works should be in readiness to be started early in the season as soon as a famine becomes imminent, and should each provide for an area of not less than, say, 40 square miles of country. The rate of payment to be based on the average earnings of coolie labour in normal years, plus an allowance equal to the percentage of rise of price of their staple food-grain. It may be necessary to supplement this by task work at the circle centres for D class labour, but this would be more a test for gratuitous relief and a safety valve to it, than a work. Piece-work is understood the people, and if started in time, will, I am confident, from my experience of one year of actual famine and two of severe scarcity (1888-89 and 1891-92) in Behar, meet the requirements of the case and will be a considerable saving in economy on work; but to make this a success large works must be held in readiness to be commenced as soon as the necessity arises.

NOTE.

One reason for my preference for piece-work as opposed to task-work is implied, but not clearly expressed, in my evidence. It is that I am of opinion that the best way to relieve distress during famine is to enable the bread winners of a family to earn sufficient to support their dependants as they do under normal conditions and thus lessen the necessity for gratuitous relief. On piece-work labour comes when it likes, goes when it likes, and earns as much as it can. Time is available for the cultivators to attend to their own fields, as may be necessary, whereas on task-work the necessary delays in mustering gangs and allotting tasks, absorbs much time which could more usefully be employed.

(President).—You are the District Engineer of Mozufferpore?—Yes.

How long have you been in that district?—I have been there about 13 years.

You know the whole district?—Yes. I know it very well.

While the famine went on, did you work as District Engineer or did you work under some other arrangement?—In the first part of the famine I was District Engineer, and I was afterwards put in charge of the Public Works Division.

For the district?—For the district.

Then you worked under the Superintending Engineer and not under the Board?—Yes.

Who were your immediate superiors?—Superintendents of Works.

(Mr. Higham).—When did you take charge of the Public Works Division?—About the 11th of February, I think.

Before that you were District Engineer of Mozufferpore and District Board Engineer?—Yes.

Who was in the District Board when you left?—They appointed a man to act for me.

Had they any district works going on then?—Very little except the relief works.

Were you in charge of the relief works before you left the District Board?—Yes.

About how many?—Not a very large number of them.

What works were they?—Road works mainly.

By the District Board?—Yes.

When you came to the Public Works Department these works were made over to the Public Works Department?—No, not all of them.

What works were you put in charge of?—I opened up some works, some new road works and the canal works that were going on.

Which canal works were they?—Bagmati canal and the Bayanali cutting.

Did you have survey works for them before you started?—More or less I had.

Had they been proposed before?—The Bagmati canal had.

Not a new idea?—It was started about October, the idea was.

When famine was supposed to be imminent?—Yes.

Who started it?—Mr. Mills started the survey.

What was he?—He was the Inspector of Works.

How many charges had you in the Mozufferpore Division relief works?—30 or 31, I think.

How many of those were on the Bagmati canal?—Three on the Bagmati canal and one on the Bayanali cutting.

And what were the other 27 charges?—One was an irrigation channel and the others were roads.

On the roads did you have any piece-work?—No.

Task-work entirely?—Task work entirely.

What were the works that you had piece-work on?—On the three sections of the Bagmati Canal and on the Bayanali cutting.

Are you of opinion that piece-work is suitable for the employment of relief labourers in all cases?—I can only speak from my experience. As the famine was not of great intensity there, I think piece-work would have met the requirements of my division.

Why did you not introduce it on roads?—Because I was not allowed to.

Orders of Government?—Orders of Government.

What arrangements would you recommend on works carried out under the piece-work system for labourers who might be too weak or incompetent to earn a subsistence wage at the rates offered, but are nevertheless not sufficiently helpless to be proper recipients of gratuitous relief, either on the works or in their own villages?—I would propose having small works carried on near the circle centres on task-work.

Would you object to the work alongside?—I should prefer to separate them.

Did you have any difficulty on your piece-works?—No, I had no difficulty.

Did you find any of the workers earned too much?—Some of them made pretty large wages.

What do you call large?—Large in our part of the world, 3½ annas a day.

A man without his family?—A man without his family.

Professional earth-workers?—Professional earth-workers.

And they worked continuously?—They worked continuously.

Did you keep any record of those who earned a great deal?—I had a record but my records have all gone to Calcutta. I think they continued to earn as much as they could.

Did you propose any maximum limit?—No, because it was a small proportion.

What was the proportion?—From recollection I should say not more than 7 per cent.

Do you think this is a special danger to be provided for with piece-works?—I do not think so.

From the statement you have given here it seems that piece-work is more expensive to Government. You increased the outturn per male unit by 20 per cent. and the earnings by 80 per cent.?—One factor that I have not shown yet is the difference in load and lift on the piece-work which was entirely on canal works. The task-work is entirely on road works.

What is the effect of piece-work on the proportion of men and women?—By piece-work the percentage of men increased, while that of women fell off. On task in June, I had 48 per cent. of men and 52 per cent. of women and children. On piece-work I had 60 per cent. of men and 40 per cent. of women and children.

What do you attribute the high proportion of women and children on task work to?—On several works it was because a lot of men had gone off to look for work, gone to Assam and to different parts.

You do not suppose the introduction of piece-work would bring them back?—Not at a late period.

If you opened piece-work, would you keep able-bodied men?—Piece-work has this effect, if opened early. When they left this they got employment elsewhere to a certain extent; I think a lot of people go regularly every year to look for work; the proportion was a good deal larger during the famine year I believe.

What is your classification for task-work?—I think two classes are sufficient—B and D. The B class were paid A wages and D class B.

How did you manage to keep them up to the mark?—Not to pay them up until the work was done, was the best plan.

In your task work you adopted that system?—Practically.

(Mr. Holjerness).—Did you turn off weakly people or did you refuse to take weakly people on the piece-works?—No, we did not.

They did not come?—They did not come.

I fancy the people themselves did not encourage them to come?—Quite so.

Why?—The labourers work more or less in gangs and a strong gang would not take a weakly man in.

You had not any special gang for the weakly people?—No, we had not. A good many went on dressing work which is light work.

What rates did you pay for the piece-works? Was it the ordinary rate or something different?—I paid the ordinary rate for the stolid labouring class with the proportionate increase on account of the rise of prices in grains. The initial rate I paid was Rs 1-9-0 per 1,000 cubic feet instead of Rs 1-4-0.

Would you advocate in another famine that all the relief works of the district should be under Public Works management?—I should. For the reason that they have a bigger reserve of staff available.

In that case there would be piece-work everywhere?—Piece-work with the exception of the works attached to gratuitous relief centres.

On ordinary piece-work you would not have weakly gangs employed on special work?—If necessity rose for it.

You do not like that?—No.

What is the defect?—There is always a certain amount of easy work that can always be got to a certain proportion.

A proposal has been made that if you had piece-works you should have three rates—one rate for the weakly gang, another rate for the strong and another rate for the professional men. Do you think that could be worked?—Yes, I should think it could.

Have you any suggestions to make with reference to civil officers?—No, I have no suggestions to make. I had no difficulties in my relations with civil officers.

Did you receive any complaints from private employers of labour that relief works interfered with them?—No, not directly.

Did you hear of any?—I have heard the Railway authorities complain that they could not get labour on the Bengal and North Western Railway.

Did you ascertain the facts?—It was outside the famine tract of my district.

Apart from the Railway, were there any people who complained?—I have not heard of any.

Mr. G. W. Disney.
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BABU VINDHYANATH JHA, Representative of the Darbhanga Raj, called in and examined.

I put in a written statement of evidence.

In the management of the relief works in Raj Darbhanga we did not set up to the rules and regulations of the Bengal Famine Code in all its details. Mr. Henry Bell, the then Manager of the Raj, in consultation with the Maharajah, drew out rules, based in principle on the Famine Code and its statement forms, which had to be considerably amended to suit our requirements. Printed copies of these rules* and forms are herewith annexed for reference and consideration of the Commission.

(a) Departures from the provisions of the Bengal Famine Code which have occurred in the Province during the recent famine.

1. As regards gratuitous relief, the provisions of Chapter V of the Bengal Famine Code were adopted as much as possible.

2. The relief operations, carried on in the Raj, may be grouped under the following three principal heads:—

(1) Relief work—such as construction of tanks, embankments, irrigation channels and other protective works and improvements in order to provide work for the labouring classes.

(2) Gratuitous relief either in the shape of grain doled out, kitchens provided, or cash paid to those who were found, either on account of old age, or physical disability or weakness, incapable of doing any manual labour.

(3) *Tuccavi advances*.—This was given to those respectable rajyats who on account of their respectability or other reasons were too proud to work as labourers on our relief works; but who could not, at the same time, pull through the famine and cultivate their fields for the next year's crops without our help.

4. Raj Darbhanga is divided into different circles and each circle is under the management of a Sub-Manager and his office. Therefore in November 1896 when the agricultural prospects began to appear gloomy and the famine was imminent, orders were sent to all the Sub-Managers to submit as full a crop report as the time permitted, and also information as to what relief works, and where, were regarded to be necessary. Therefore when these reports were received, the Maharajah thought it best to place the Sub-Managers in charge of all the famine arrangements in their respective circles. But in order to obtain proper professional advice, one Mr. Scott, a passed Engineer of the Rurki College, was appointed Consulting Engineer to supervise all the relief works in the Raj, and the establishment mentioned in the body of the rules,* marked A, was placed under the Sub-Managers.

5. On perusal of the rules, the Commission will be pleased to find that in our relief works we followed the piece-work system; that is to say, we paid by results. Our relief works were practically small contract works with each mate of the gang as a contractor who was paid an extra sum of 2 annas for every 1,000 c. ft. of earth-work done by his gang for supervising the work and controlling the gang. We did not fix any minimum wage, as it was considered demoralizing.

6. The rates enforced on our relief works, as mentioned in the rule marked B., were as follows:—

		C. feet.
1st 3 feet @	0-2-6 per %	or 1-9-0 per %
2nd do.	0-3-0 do.	1-14-0 do.
3rd do.	0-3-6 do.	2-3-0 do.
4th do.	0-4-0 do.	2-8-0 do.
5th do.	0-4-6 do.	2-13-0 do.
6th do.	0-5-0 do.	3-2-0 do.

Over and above this a monthly allowance of one anna was allowed for each basket, the same amount for a kodali, that the labourer brought of his own. Sunday was allowed as a holiday, but the labourers were paid for the day two-thirds of the daily average earned by them that week.

7. Our system worked successfully both with regard to the relief of distress and the saving of human life. I personally inspected one relief work or the other almost every morning during the famine operations, and found the men, both on relief works and our gratuitous relief register, very fairly satisfied. I think our system had also the advantage of being economical. But the best way to find that out will be to take one of our tanks or bunds and compare its total expenditure with a tank or a bund of the same dimensions constructed under the Famine Code Rules by the Collector.

Our average cost of a tank.

L. 370 ft. B. 340 ft. D. 15½ ft.
came to Rs 4,667-3-9 (average Rs 2-10-6 per 1,000 cubic feet), and that of a bund

L. 5,400 ft. B. 20 ft. H. 6 ft.
to Rs 1,239-8-3 (average Rs 1-10-9 per 1,000 cubic feet).

8. No case of death from starvation came under our observation. There were a few deaths among the very

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old and weak and sick persons in receipt of our gratuitous relief; but that was death from natural causes, and would have taken place all the same without any famine at all.

9. Taccavi advance system also proved a success. The Maharaja Bahadur sanctioned the payment up to one year's jamma to be advanced to the raiyats whom the Sub-Managers found to be really in want of help. Besides those raiyats who wanted to excavate tanks, etc., on their own account, received advances to meet the expenses.

10. Our experience, as we have remarked before, is limited to the relief works carried out under our own rules. To us they appear to have worked very well, and therefore I would recommend their adoption. Before

actually carrying out the rules, Mr. Bell had shown them to both Mr. Finucane and Colonel Bisset, and they quite approved of them. He also found that Mr. Izat, Manager and Engineer-in-Chief of the Bengal-North-Western Railway, had also carried on extensive works exactly under this system of paying by results.

11. With regard to the system of giving gratuitous relief we gave it in all the four following systems:—

- Kitchens.
- Poor-houses.
- Grain doles.
- Payment in cash.

But in my humble opinion, the best system appears to be the cash payments made to the recipients themselves by some responsible officer. This system has the great advantage of the amount meant for the recipients reaching their hands safely. A list of persons deserving gratuitous relief should be first prepared by the chief men of the villages, and this list should be carefully checked by the responsible officer himself, seeing each person, and making full enquiries about him before entering his name in the register. After a list has been thus prepared, a certain sum should be fixed that is to be given to each person a week. Whether the payments should be made weekly, fortnightly, or monthly, should depend mainly upon the number of honest and reliable men one has under him, by whom the payments are to be made. If one has fewer reliable men at his disposal, I would prefer monthly payments rather than leave the weekly payments to be made by men upon whom I cannot rely fully.

12. I take this opportunity of mentioning here that in order to get a correct list of persons really deserving gratuitous relief, a very great deal of trouble and care are necessary. Every person in the village who is entrusted with the initial preparation of this list will try to put in as many of his own men as he possibly can. And I must say that it is no easier matter to get at the truth here than anywhere else. But when once such a list has been prepared, one may regard himself to have accomplished more than half the work. Therefore we had received special orders from the Maharajah to see to this ourselves; and from my own experience I must say that the preparation of such a list must be done by a very reliable and experienced officer himself.

13. Some people are under the impression that if monthly payments are made the recipients will eat it all up in a week or so and then begin to give trouble *de novo*. From my personal experience during the last famine I found this supposition to be pretty groundless. When once the persons know that they won't get more than a certain amount within the month, do what they will, they will live up to that. I could afford to spare only two proper men under me, and therefore I was obliged to make monthly payments myself; and I am glad to say I had not one single complaint from any recipient of the gratuitous relief whatever, and therefore had absolutely no reason to repent having started the monthly payment system. This system of cash payment succeeded so far, that after a few months, many of those persons who had been selected by me for gratuitous relief, simply on account of their emaciated appearance and general weakness, became quite strong enough to be sent out to the relief works as able-bodied coolies, and there they worked satisfactorily.

14. But before cash payment is started, enquiries should be made whether there is a bunniah in the village or near abouts, where these persons can purchase grain at reasonable rates. If there are no such bunniahs in the locality, a gola or granary must be opened and put in charge of a man, and the price of each kind of grain fixed at which the persons on our gratuitous relief register should buy it.

15. To me the very first thing that suggests itself is that there should be a general rule of course, but the details of Bengal, Behar and Orissa should be separately codified. The peculiarities of the soil, the conditions and habits of the people, in each of these sister provinces, are so different from one another that one set of details cannot suit them all perfectly.

16. Though we had no personal experience of working with the forms of the Famine Code, but as far as we can make out, they appear to be very prolix and not easily workable. Of course the District Collectors and other responsible Government officers in charge of relief works in the last famine will be the best persons to say whether these forms have been understood and worked satisfactorily. If so, I have nothing more to say. But if not, then I would beg to suggest for the consideration of the Commission that experts in drawing up forms should be requested to draw up much simpler and more easily workable forms, with this special object in view that the men of the class generally entrusted with the filling up of these forms may understand them easily.

17. I would also beg to suggest that some such means of paying the labourers may be arrived at, that the money may pass through as few hands as possible before it reaches the recipients.

18. Another very important point that I beg to bring to the notice of the Commission is that as many permanent servants should be placed in charge of the famine management as possible. Temporary hands only look to the present and are therefore very careless, and have very little to lose if eventually their management fails.

(President).—You are a cousin of the Maharajah of Darbhanga?—Yes.

All your relief works in the Raj were principally on the construction of tanks?—On tanks, irrigation channels and bunds and other kinds of improvements.

What kinds of irrigation channels were these?—For watering the fields from the rivers.

Are they used only when rain fails, or are they used every year?—Generally when the rain fails, but they may be used in other years too.

How many Sub-managers are there?—Eight.

The Sub-managers are like Tahsildars?—They have Tahsildars under them.

Has he more than 1 Tahsildar?—3 or 4.

How many villages have the Tahsildars to deal with?—It depends upon the extent of the circle.

You worked upon the piece work system from the first?—Yes.

How is the gang formed?—When the coolies come in, a gang of 15 is formed, and they have to appoint their mates.

Are they family gangs?—Generally family gangs.

You did not find that they left out the weakly men and women?—They were very careful to take in men and women who could work.

What became of the men and women who were not taken on?—We gave them gratuitous relief.

A good many men and women who were not able to work very well, but still able to do a little work, were they included in the gang?—We took a few, but generally able men who could work were taken on.

The rest would live in the villages?—Yes.

They got gratuitous relief from kitchens?—From kitchens, poor-houses, grain doles, and payment in cash.

Not all in the same village I suppose?—Not in the same village.

How did you know which people to select for gratuitous relief?—We made enquiries in the villages.

What sort of people went to your kitchens?—Low class people, sometimes higher classes also, but generally lower class of people.

They were not able to do any work?—Very little perhaps.

And the poor-houses, what class of people went there?
—We had low classes.

Where had you poor-houses?—One at Parihar.

What classes went to that?—I have not much experience of the poor-houses.

In village relief did you give grain doles or cash?
—We gave grain doles, but in those villages that were under me I gave cash.

Which did the people like best?—They all preferred cash.

Were you strict?—I was very strict.

What sort of people were they?—Widows. Some were physically unfit such as blind, lepers, cripples, etc.

If a man looked fit, did you give him gratuitous relief?
What would you do?—I would never give gratuitous relief to such a person.

You paid them by the month?—Yes, I paid them by the month.

Had the bunniahs always plenty of grain to sell to those who had the money?—They generally had.

Do you think the bunniahs combined in any way to keep up prices?—Yes, they did.

But if it was known that 3 or 4 bunniahs were combining to keep up the price, would not some other bunniahs undersell them?—There was no such organisation that I know of.

Do you think that bunniahs and other grain dealers were very active in buying and selling grain during the famine?—I have no personal experience, but I heard they were.

How did grain travel all over the country?—Mostly by railway and some in carts.

(*Mr. Holderness*).—Did you import grain?—We bought some Burma rice.

Much?—A considerable quantity.

Did you go on buying all through the famine?—No, we bought once.

Then stopped?—Then stopped. We distributed it among our Sub-managers.

Why did you stop importing?—We thought we had bought enough.

And afterwards?—We bought no more.

You were telling us that able-bodied work-people were taken on to the relief works, and that those who were left in the villages were mainly supported by their friends?—I am not quite sure. Every man took his wife to the relief works.

But suppose, his wife is not well?—Then perhaps we would not pay, but it is very hard to get at the truth.

Did you expect that the men who went to the relief works would support their relations?—Yes.

Did you have more people on gratuitous relief than you had on relief works?—More on relief works than on gratuitous relief.

Was cooked food liked as well as money?—They preferred money.

If a village had only cooked food, did not they grumble?
—They did grumble.

Was there anybody who preferred cooked food?—Very low classes.

(*Mr. Bourdillon*).—There were no kitchens in Baharia, I believe?—There were no kitchens.

(*Mr. Holderness*).—Your works were mostly tanks?
—Tanks and Bunds.

Will these tanks be useful?—They will be useful.

For irrigation?—For irrigation.

How much altogether was spent?—£10,69,325.

Does that include advances?—Yes.

(*Mr. Bourdillon*).—How much was spent on the establishment?—£45,365.

Were the rents collected?—No. We collected in the beginning, but when we saw that they were hard up, we did not collect.

Will that be recovered?—I do not think it will be recovered.

In addition to that you have got advances to recover?
—Yes.

To what use did the Maharaja put his grain? Was any grain sold?—Takkavi advances were given.

Did you hear at any time that importation had affected the price of grain in Durbhanga?—I think not.

(*Mr. Holderness*).—What has happened to the people who were on gratuitous relief?—I think they are provided for as they are in other years. They are provided for by the well-to-do people of the village.

Did you publish an order to stop gratuitous relief?
—Yes.

(*Mr. Bourdillon*).—Did you give them any fare-well donations?—No.

Did you tell your men to look after the poor after the gratuitous relief was stopped?—Yes, when famine was over we told them that they would not get any gratuitous relief.

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MR. JAMES ROBINSON, District Engineer, Bhagalpur, called in and examined.

I put in a written statement of evidence and written answers to the Commission's questions.

All the relief works undertaken were conducted by Preliminary Civil Agency and none by the Public Works Department. In North Bhagalpur (*i.e.* North of the Gangee) there were 21 works, 9 being on roads and 12 on tanks; in South Bhagalpur 3 works, all on roads, and considered as test-works. These numbers were progressively attained, as all the works were not started from the commencement simultaneously.

In North Bhagalpur relief works opened in the middle of January 1897, and closed on the 10th July of the same year. In South Bhagalpur the first of the three test-works opened in April, and they were all finally closed in the third week of June. The total expenditure from Provincial and Local funds upon relief operations amounted to ₹1,64,480, out of which ₹26,609 represents the cost of rations, doles and allowances to persons gratuitously relieved. The maximum daily attendance of workers was 24,565 men, women and children, and that in the week ending 8th May, over fifteen works; the establishment at this period being one supervisor, one non-official "charge superintendent" and fifteen "officers in charge." The contents of this paper relate to relief works, and do not deal with other measures of relief which did not come within the range of the writer's duties.

The prescriptions of the Bengal Famine Code were followed upon all works in North Bhagalpur from January till the fourth week of May; after which, by permission of the Government, the restrictions of the Code were relaxed and a departure into the piece-work system was made. In South Bhagalpur, where all the works were test-works, the prescriptions of the Famine Code were not followed. The method of applying the piece-work system was as follows:—

From the ready reckoner in the Bengal Famine Code (latest edition, pages 90 to 93) the wages due to an adult male of class A based upon the current price of food would be taken, next from the Honourable Mr. Glass' tables (1A, 2A or 3A according to the character of soil) the earth-work task for such a worker would be obtained according to lead and lift actually found: from these data the rate per 1,000 cubic feet would be struck and to that would be added 1 anna per 1,000 cubic feet for the mate or headman over every 20 or 25 persons. The rates per 1,000 cubic feet of earth-work did not include dressing, which and the setting out of work were done by daily labour. Over every group of gangs aggregating about 750 persons there would be a gang mohurrir on wages of ₹10 to 15 per month, charged to works directly. Payments were made to the headmen of gangs at first daily, afterwards, twice a week. The workers were encouraged to form their own gangs (usually containing under a single

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headman, 20 persons, 40 the limit) and to select their own headman. On some works it was found convenient to have certain special miscellaneous gangs to which new arrivals would be drafted for a day or two, pending their appointment to an ordinary gang, and in which those who had no neighbours or fellow-villagers upon the work might unite together. Forms 16 and 17 of the Code were dispensed with; forms 18 and 19 were modified as per samples* attached. No Sunday labour was taken and no Sunday wage given, and no dependants were entertained.

The degree of success attending the administration of relief under this system was apparently complete. Under the task-work system of the Code, although no actual failure ever took place, it was with a great strain upon the capabilities of the relieving establishment that this condition was maintained. In respect of the relieved persons, much time daily was lost to them in satisfying the demands of the Code for the nominal muster roll, assignation of daily task, measurement of work done, and payment for the same: the loss of so much time was an appreciable hardship upon the distressed, particularly in the hot summer days of May, June and July. The piece-work system avoids both these

difficulties, while it allows of the recording of the numbers daily present by a simple counting of the labourers at any convenient hour of the day. The success of the piece-work system in reaching and relieving distress may be estimated by the following comparison:—

Ratio of wages of an adult male unit—

- (i) Possible maximum under Famine Code 21 pias.
- (ii) Earned under task work . . . 16 "
- (iii) Earned under piece-work . . . 20 "

(vide final Famine Report Form II for District Bhagalpur as a whole, column 19). Furthermore, as the following table will show, the introduction of piece-work, while maintaining or perhaps slightly increasing the proportion of women on the works, made for the reduction of the children workers; indicating most probably that the parents, if allowed to work according to their will, would rather maintain their children (at least the smaller ones) than force them to hard labour: the conclusion is drawn that as a means of relieving distress the piece-work system was not wanting in the power of reaching the little ones as well as the adults:—

MONTHS.	PERCENTAGES FROM FORM I, FINAL REPORT.				REMARKS.
	Of total workers to population affected.	Of dependants to workers.	Of women workers to total workers.	Of children workers to total workers.	
	17	19	20	21	
18th to 30th January 1897	02	9 8	39 3	29.5	Task.
31st January to 27th February 1897	1.09	3 75	34.15	15.45	Do.
28th February to 27th March 1897	2 98	5.60	38.24	15.65	Do.
28th March to 24th April 1897	2 87	6.1	45.66	14.37	Piece and Task.
25th April to 29th May 1897	5.25	5.1	44.58	12.44	Do. and do.
30th May to 26th June 1897 . . . . .	.53	...	46.01	6.29	Piece.
27th June to 10th July 1897 . . . . .	.15	...	52.35	6.86	Do.

It should also be observed that both from the humanitarian and ethical points of view, this result is commendable, while the gain in simplifying the administration of relief by the reduction of numbers should have some value too. The dependants upon workers who had used to be gratuitously relieved at the works under the task work system, were not admitted to relief at the works under the piece-work system, but were allowed to draw their doles from the separate centres for gratuitous relief. The numbers at such centres might consequently be expected to increase, and this apparently did occur. Yet, since the dependants were gratuitously relieved in either situation, there would be no real augmentation of the relieved non-workers in the locality; and just as the able-bodied seem to have undertaken, by extra labour, to maintain their smaller children, so it remains probable that a proportion of the dependants were also similarly assisted by their working relatives, but of this there is no evidence in figures. However this may be, the fact remains that the late dependants were not deprived of their relief: they were only relegated to the class to which they naturally belonged, and the administration of relief work was thus simplified without additional cost.

Next, as to the relative economy of the two systems, it is hardly necessary to go into figures: for whereas under the task-work system an idler is bound to receive the penal wage, under the piece-work system the relief given in money is strictly regulated by the quantity of work done at a fixed rate, and there can be no loss whatever by short work. The average outturn of earth-work dug and carried per male unit was—

- (i) under task-work 36 cubic feet } vide final
 - (ii) under piece-work 46 " " } Famine Report
- Form II District Bhagalpur as a whole—Column 16.

Further, while even the headman is paid in proportion to the work done by his gang, the piece-work system effects great reduction in the temporary establishment of gang mohurrirs and writers, as well as in the higher staff

of overseers and sub-overseers, for the administration is vastly simplified. It is reckoned from the experience of the late famine in this district that the relative cost of establishments in task-work and in piece-work was—

	Task.	Piece.
On gang mohurrirs . . . . .	. 5	to 1
On sub-overseers . . . . .	. 2.5	to 1

There remains besides with the latter system, a great advantage in respect of regularity and order, efficiency and the power of expansion.

The following are certain disadvantages inherent in the task-work system of the Bengal Famine Code.

(i) *Over elaboration.*—The elaboration of the task-work system, viz., a minute classification of the labourers, a daily nominal roll, the determining of a task varying from day to day with the composition of the gang, setting out the same, the almost daily comparison of the work done with the task given, and the almost daily calculation of wages earned, all represent an amount of combined clerical and field labour which placed the severest strain upon the establishment, forcing them to work all the day and half the night, for this work had to be performed in all its successive details for every gang. Such a strain cannot be put upon any staff without imminent danger of a breakdown. Returns and accounts are always on the point of running into arrears.

(ii) *Hardship on the labourers.*—The labourers, when their numbers become large and gangs multiply, are necessarily often set to their work before the task for the day can be given out (this is against the Code, section 65); numbers are kept idle during the best working hours of the day and all are detained late in the evening, while the measurement of work done is being made and the value of it computed. All this amounts to a serious hardship upon the very objects of relief.

(iii) *Scarcity of suitable minor establishment.*—The class of gang mohurrirs and petty writers who have

* Not reprinted.

to be largely employed under the Code system, are all temporary men, recruited in haste; they are no sooner engaged than numbers fall out, some inefficient, some unable to stand the strain of the severe duty imposed. Meanwhile the number of labourers increases and soon it is found that the material for the petty establishment, untrained from the very beginning, is not forthcoming in the district. For want of this material the Code system is found to be greatly wanting in the power of expansion.

(iv) *Facilities offered for irregularities and dishonesty.*—

The conduct of relief work under the task-work system of the Code places large opportunities for irregular and dishonest action before the minor temporary employes, in fact they are led into temptation; these men are entrusted with duties and responsibilities which at ordinary seasons would never be offered to persons of their class, whose service is to be but for a season, whose antecedents are not known, and who must yet be a necessary and important element in the agency of relief. Yet the system demands a large use of this element.

All the disadvantages above mentioned as inherent in the task-work system of the Code, are greatly reduced on the piece-work system which has besides the further advantages of—

(i) *Economy in wages* (*vide* final Famine Report Form II for Bhagalpur District as a whole, column 17).

The cost rate per 1,000 cubic feet of earth-work done being—

	R.	a.	p.
Under task-work	2	5	6
Under piece-work	2	4	0

and this while the male unit was earning higher wages in the proportion of 5:4 [see (b) above.]

(ii) *Economy in minor establishment*—which point has been referred to earlier in this paper (b).

To sum up under this head.—given a recurrence of the same conditions that were present during the recent scarcity in the District of Bhagalpur, *i. e.* a watchful attitude on the part of the District Officer, early preparations, prompt action before scarcity intensifies into famine, and the same social conditions as here prevail among the agricultural classes, the conclusion appears justifiable that, where relief is to be given in the form of work and wages, the piece-work system of labour, supplemented by an agency for gratuitous relief is in all respects to be preferred to the task-work system of the Bengal Famine Code. It would seem probable that even under harder conditions and in the intense forms of distress the piece-work system might be so handled as still to maintain its superiority over the task work system as a more efficient instrument of relief.

(i) The writer of this paper having been concerned with

(d) Other recommendations or opinions.

the relief of distress, not amounting to actual famine, upon four occasions in this district, has observed that on the first three occasions the difficulty of locating the distress imminent and of gauging its local intensity in different quarters, disposes district officers to propose a vast number of relief works scattered over an area very much wider than that which the distress is afterwards found really to affect. Estimates wanted for a number of new proposals are then called for just when the energies of the District Board's Engineering staff are employed, either in arranging for the opening of the first works or in conducting them: then these new projects are prepared in haste, and after all it has been found that two-thirds of these are not wanted. Now that experience, in this district at least, has discovered the tracts that are liable to the recurrence of distress, it is desirable that a systematic working up of certain selected projects should be undertaken during the intervals of prosperity, something being done from year to year, by a special subordinate engineering staff supplied by the Government and acting under the orders of the District Engineer. The Board's establishments are too small to undertake this special duty.

(ii) Next, while this district shows embanked roads, dating from the famine of 1874, still unbridged, while the number of such roads increases after every occasion of famine or scarcity, and while the tanks dug as relief works are beneficial only within very narrow limits, it appears that relief works on roads or tanks bring but little increase of prosperity to their neighbourhood, in the case of roads mostly, but the promise of long deferred completion *sine die*.

Hence it is desirable to consider whether large agricultural embankments and drains might not be introduced into the category of relief works. The difficulty attached to such schemes is the existence of private and sometimes conflicting interests which there is not time to consider or reconcile in a season of pressure and haste. Still it would be possible, perhaps, with a due allowance of antecedent time, to provide for all interests, to enlist the co-operation of landed proprietors and to prepare, under the guidance of Government officers, schemes of agricultural improvement, the cost of which as relief works would be shared with Government by the proprietors whose estates would be thus improved.

(iii) It is suggested that only two classes of labour be recognised on relief works, whether the system be that of piece-work or task-work, *viz.*, those corresponding to B and D of the Code, classes A and C being eliminated.

(iv) Also that under either system the children below nine years of age be considered non-working and only one grade (9-14) of children be retained, that one grade to have half the task of an adult male but $\frac{2}{3}$ of the wages: and that under the task-work system non-working children should have something more than a $\frac{1}{2}$ wage (as at present) say a $\frac{3}{4}$ or even $\frac{1}{2}$ wage.

Written answers to the Commission's questions.

- * 1. Area 500 square miles; population 325,000.
2. Both.
3. (a) and (b) much higher; rice ordinarily 16 seers; in 1897, 7 seers per rupee.
4. Two bad seasons, *viz.*, rains of 1895 and 1896.
5. Yes. I know of no such class.
6. Yes. Soil in Supoul Thannah very light: in Bongaon hard clay surface. No facilities for irrigation.
8. It was the most severe of the local scarcities I have seen—1884, 1889, 1892, 1897.
10. At the maximum, about 8th May, the percentage of relief-workers to the affected population was . . . 7.56
Gratuitously relieved from public funds . . . 1.17
Total . . . 8.73

But relief from the Charitable Fund was in addition to this, though not known.

12. No.
16. The change to the piece-work system was followed by a reduction of numbers, but the reduction is attributed to other (agricultural) causes.
17. No.
18. Test works were opened wherever the need for relief appeared to be wanted.
19. Yes.
20. Yes.
21. *Vide* answer to 10 above.
22. (a) Yes.
(b) Yes.
(c) Not more.
23. The relief works were numerous. No workers resided at sites of work. Residence at works would be disliked. I think residence would be too severe a test.
24. *Vide* answer to 10.
26. I do not think this condition obtained here.
27. By means of doles of grain and money only.
30. (a) 1,64,480 rupees.
(b) 1,898,418.
(c) 1 anna 4 pies.
(e) Yes.
33. (a) The task-work system of the Code is, in my opinion, defective.
39. There was relief work first under the task-work system and later under piece-work; gratuitous relief in the shape of doles at fixed centres: relief from the Charitable Fund and by local zemindars.
40. Only of relief works.
41. The piece-work system.
42. Task-work abandoned after trial.

* The numbers refer to the questions drawn up by the Commission.

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43. *Vide* my note of evidence.
44. *Vide* separate evidence notes.
45. *Vide* separate evidence notes.
46. *Vide* separate evidence notes.
48. I think the classes in distress preferred the piece-work to the task-work.
49. *Vide* separate evidence notes.
52. No experience of this kind of relief works.
53. They will be useful when completed.
54. There will be room for new roads, but unfinished and unbridged roads are not a desideratum.
55. No material for metal available in North Bhagalpur.
56. None collected.
57. (i) Very useful.
(ii) The usefulness is very limited.
59. (a) We had on small tanks 1,000 to 2,000, and on large tanks 5,000 to 6,000 persons at work.
(b) Nothing but severe tests.
60. Many more tanks might be excavated.
62. I think they could in South Bhagalpur in certain selected localities.
63. I think in South Bhagalpur.
67. I do not know of any.
70. Bengal Famine Code, section 5(i) and notes following. The Code was observed and plans and estimates were ready for some works. See my evidence notes.
71. (a) 4 miles.
(b) No experience here.
72. Yes
73. I would recommend it for volunteers, but would not make it a test of distress.
74. The exception altogether.
75. No condition imposed and no resident labourers.
76. (a) No.
(b) No evidence.
(c) Yes.
77. No experience.
78. Not large enough.
79. (a) No.
84. Task, 100; piece 9, as the latter was introduced late.
85. My opinion is that it is so suitable.
86. Given.
87. (a) I do consider them overstated.
88. I would establish a higher and a lower rate for work.
89. In this district the numbers of Famine Code class A are so small that I would not arrange specially for them; again they are practically hard to distinguish.
90. (a) 20 to 40 persons.
(b) As above.
91. (a) Yes, if they select their own headman.
(b) Rare.
92. Given in evidence note.
93. I think there would be no difficulty.
Vide evidence notes.
94. Follow Bengal Famine Code.
96. Section 104 would be alone sufficient.
96. A. Yes.
97. *Vide* evidence notes.
98. Nine years.
99. For task-work the Code penalties.
100. Necessary.
101. No.
102. Not unless the piece-work system is recognized and adopted
103. Yes, on task-work only.
104. Cannot find the reference.
105. I consider that Honourable Mr. Glass' tables are sufficient.

106. Have not seen the references referred to here.
107. Yes, by advice: this was the Bhagalpur system.
108. Ten to 20 per cent.
109. I do not know it.
112. (a) Maximum number of men 50 per cent.; minimum number of men 40 per cent.
(b) Given.
(c) Work on both systems not simultaneous.
127. No.

(President).—You are the District Engineer of Bhagalpur?—Yes.

Have you been in that office long?—18 years.

In the same district?—In the same district.

The scarcity was not very severe in Bhagalpur?—No.

Were there relief works or only test works?—Test works first and then relief works afterwards.

You have given a very full and clear description of the system of piece-work adopted, and of the comparative advantage in your opinion of piece-work over task-work. I see you say that "the introduction of piece-work maintained or perhaps slightly increased the proportion of women on the gratuitous relief." You say it led to some increase, was that increase very marked?—There was not a very great increase.

The piece-work system was simply applied under your supervision, I suppose, to excavation of tanks?—To tanks chiefly, also to roads.

Is it advisable to apply it in other kinds of works?—Certainly, I think it should be; to breaking road metal for instance.

You said you had four occasions in the district for observing relief of distress. What years were they?—1884, 1889, 1892, and 1897.

1884 and 1889; was that on account of the local failure of crops?—Yes, the 1884 distress was very local.

(Mr. Holderness).—Was the late distress keener than what you have seen on previous occasions?—This was the worst.

On account of failure of crops or high prices?—Rather high prices.

(President).—What was the local idea; why did prices go so high?—That was due to failure of crops to a certain extent, and also to the very large export.

Did the people think that prices were going up reasonably high or did they think them unreasonably high?—They thought that prices were going up unreasonably high.

These agricultural embankments referred to by you, what are they for? For keeping out floods?—For keeping out floods and holding in water and distributing it.

You think all children below 9 years ought to be considered non-working?—I think so.

Above 14 you consider they can be treated as adults?—Yes.

With reference to your answer to question 23, is there any reason why people in this country should particularly dislike residence on works?—No. But all the same residence on works is much disliked by the people and would constitute too severe a test. I do not think people came on to the works who could have avoided doing so.

They were all destitute more or less?—Yes, more or less.

(Mr. Holderness).—Had you piece-work always from the first?—Not from the beginning. We had piece-work from the third week in May.

You say the children fell off when piece-work was introduced?—Yes.

Did numbers fall off when you introduced piece-work?—The numbers did fall off.

Would you be in favour of having piece-work throughout from the beginning?—I should.

What rates did you take?—I took wages from the Famine Code, then I took tasks from Mr. Glass' tables.

What were the rates compared with ordinary rates?—It was rather lower.

(*Mr. Bourdillon*).—Piece-work on famine works was lower than the ordinary district rate?—Yes.

There was no contractor?—There was no contractor.

And you prevented any small contractor from going in?—I dealt directly with the headmen of the works gang.

(*Mr. Holderness*).—Did you find it necessary to make special provisions for weakly people?—No. We had very few weakly people.

Then if you had weakly people, what would they do?—We sent them off to gratuitous relief.

Had you sufficient projects ready when the famine commenced?—Quite enough for our works.

What were they? Roads and tanks.

Had you many works at a time going on?—Yes, we had 21 works altogether. They were not all commenced simultaneously.

Were they large works?—Not what we call large works.

(*President*).—I see you say in answer to question 103 that on task-work you are in favour of paying a Sunday

wage, but on that kind of work only. In case of piece-work how did the people manage?—They may work on Sunday if they like.

Did you give them daily piece-tasks?—I gave them about a week's work at a time.

When did you pay them?—In the beginning we paid them daily, and after a few days twice a week.

(*Mr. Holderness*).—Were these works supposed to be civil agency works?—All civil agency works.

What is the size of your gang?—From 20 to 40.

Who made the gang?—They made their own gang.

You said you had one mohurrir for 750 workers?—Yes.

That was for counting and assisting?—For counting and assisting in setting out and measuring work.

The mohurrir measured the work?—Assisted the officer in charge in measuring work.

Do you think there is scope in Bhagalpur for embankments and drains for future relief works?—I think there might be, but I am not positive.

*Mr. James
Robinson.*
31st Jan.
1898

At the Additional Commissioner's Office, Bankipur.

EIGHTH DAY.

Tuesday, the 1st February 1898.

PRESENT:

SIR J. B. LYALL, G.C.I.E., K.C.S.I. (PRESIDENT).

SURGEON COLONEL J. RICHARDSON.

MR. T. W. HOLDERNESS, C.S.I.

" T. HIGHAM, C.I.E.

RAI BAHADUR B. K. BOSE, C.I.E.

MR. J. A. BOURDILLON, C.S.I., (*Temporary Member for Bengal*).

MR. H. J. MCINTOSH, *Secretary*.

MR. A. G. TYTLER, C.I.E., Sub-Deputy Opium Agent, Saran, called in and examined.

(*President*).—What position do you hold, Mr. Tytler?—I am Sub-Deputy Opium Agent of Aliganj covering the Suwan and Gopulganj sub-divisions of Saran.

You have known Behar for a number of years?—Yes, 27 years.

You came in after the 1866 famine?—Yes, but I saw the famine of 1873-74.

How do you compare the famine of 1896-97 with that of 1873-74? Which do you think was the most severe?—I think the one of 1896-97 was.

Do you think there was a greater failure of crops?—Yes. We had a partial rice crop in 1873-74, but in 1896-97 there was nothing at all.

What sorts of preceding harvests had there been?—The preceding *rabi* was perhaps a ten-anna one, roughly; the *dhadoi* was poor, and there were no late rains.

Did you, from your experience, anticipate a famine at once?—Yes, when I saw the rice crop fail. But it must be remembered that in Saran we depend a good deal upon irrigation, perhaps half our *rabi* is saved by it. I read paragraphs 22-24 of Mr. Bourdillon's final report; also paragraphs 65 and 66. The views expressed therein seem to be correct. I don't think you can have a downright famine in Saran, because there are so many kinds of harvests; there are also intermediate things like *cheena* and *marwa*, and I suppose they are the best agriculturists in the place. Of course there may be very severe scarcity indeed.

Was the great rise in prices of the common food-grains which occurred in September to November 1896, and was more or less maintained for the next twelve months, in your opinion a reasonable rise. That is to say, was it fairly proportionate to the failure of harvests, lowness of local stocks, and cost of replenishing them?—I think it was, owing to the general failure everywhere.

In market towns which came under your observation, was it possible to identify the persons who fixed the bazar or current rates of food-grains declared from time to time?—I cannot speak from personal experience. It is always possible I should think. I myself noticed that the price of grain fluctuated very much from day to day; this was due partly to alarm and perhaps partly to observation of distant markets.

(*Mr. Bourdillon*).—Was it due to want of supplies?—No. I don't think there was any fear except once. I was beginning to fear that local supplies might run short. Imports had entirely ceased and the question was whether this dense population had grain enough. Just then Burma rice began to come and it was all right.

(*President*).—When Burma rice came did prices fall?—*Makai* didn't get cheaper. *Makai* is used, as we use biscuits, as a lunch.

How many meals do the people eat in the day, and of what eatables and drinkables does each meal ordinarily consist?—A man eats three times a day. In the morning there is the *busra*, that is, the stale food over from the previous day; in the daytime there is *suthoo* or parched *makai*. It is eaten like parched gram up-country. In the evening he has rice and dal and a vegetable curry. He very seldom has meat. He has only one cooked meal a day, and if he gets that, he is fat on it. Later on in the scarcity they kept to the same number of meals, but reduced the amount of each meal.

(*Mr. Bourdillon*).—Is rice the principal grain eaten?—Yes, by the more respectable class. It varies in certain seasons; the poorer man goes in for *marwa*.

(*Dr. Richardson*).—Does dal form part of the meal?—Yes, invariably. They cannot do without it.

(*Mr. Holderness*).—What is the quantity of rice eaten?—It is a wonderfully small amount. A grown man would have about three-quarters of a seer for his dinner.

Is the poor-house ration as good as they get at home?—Yes. I think so.

(*Mr. Bourdillon*).—When the price of rice rose they could not afford it, could they?—They kept on reducing the amount they ate. The early *marwa* came in and they ate that.

(*President*).—You mention that prices fluctuated frequently. When prices were high did trade seem sensitive? Did the grain flow in freely and quickly?—Putting aside Burma rice there were no imports. Owing to the great fluctuations I was inclined to think that there was something like a ring.

(*Mr. Holderness*).—Did not petty local traders come in?—Latterly they did.

*Mr. A. G.
Tytler.*
1st Feb.
1898.

Mr. A. G.
Tytler.
1st Feb.
1898.

(President).—Was any action taken by any person or authority to import food-grains into any part of the country?—I think only the Hutwa Raj. They imported largely, about 80,000 maunds.

Did you observe the effect of that importation?—It was a very good thing for two reasons, first, because there were no markets except one, and secondly, because there were no large dealers. I think they would have been in a very bad way, but for that importation.

How was it disposed of?—I don't know the details. Agricultural wages amongst themselves went down to two-thirds.

How are they paid : in grain?—Yes.

Suppose that instead of relying entirely upon the action of private trade and the Indian market, the Government had resolved to import grain from abroad to a notified amount and for a strictly limited purpose, that is, for use at a large number of its poor-houses, kitchens and relief works. What effect do you suppose such action would have had?—I think if they were given to understand that it was only for workers on relief works, and to be used in kitchens, it would have had a good effect.

Do you not think it would have affected private trade?—No. I think it would have kept prices easier, because the proportion on relief works is very small. At the end markets were getting small because traders were afraid of selling more rice, thinking that the *bhadosi* would come in.

As regards Saran, under normal circumstances may the population of the affected area be considered to enjoy a fair measure of material well-being?—Certainly, they have a good soil. They have not many luxuries, but they keep in excellent health and are in very good condition.

Is that true of the rest of Behar?—I cannot say.

Is there any section of the population which from special causes is ordinarily in an unsatisfactory and precarious condition?—The very small landholders are, and the labourers. In my district 95 per cent. of the agriculturists are in debt. The man who is unfortunate is the one who cannot get any one to lend him money. Nobody will lend to those without small holdings.

(Mr. Bourdillon).—Do you think that the *mahajans* were obliged to carry these people on?—Yes, up to a certain time.

Is the land hypothecated. Does the bunniah take the produce?—Yes, entirely. It is generally the *mahajan's*.

(Dr. Richardson).—What is the proportion of the population of this very poor class?—It is difficult to say. The average holding would be something like 2½ acres per family.

(President).—What is the holding in Saran of a man who would be considered impecunious. One acre?—Yes, I should say so. The curse of the place is the large population, and they won't leave. They will insist on returning to their homes.

The entirely landless class do not have any holdings. Is that class very numerous?—No, but a man does generally have some holding at all events.

Do these very small tenants and landless labourers have much jewellery?—The first thing seen at the approach of the famine was the bunniahs sitting round the bazar and the women getting rid of their anklets and bracelets. The people regretted very bitterly the going down of the value of silver.

(Mr. Holderness).—Can you say how far the people sold their brass *bairans*, and used earthen ones?—I cannot say. I don't think to any extent.

(President).—Did you hear anything of cattle being sold?—Cattle were rather expensive. The danger with us was the fear of a sudden collapse owing to the large population. The assistance given was just adequate.

(Mr. Holderness).—Do you know anything of Azamgarh or Gorakhpore?—The soil is absolutely different. Ours is a soil most of which with good cultivation retains a certain amount of moisture; still you require irrigation. In Saran with less labour it yields you a better crop. The higher you go the yield is much less.

(President).—Can you say to what extent the habit of storing food-grains in pits and other receptacles has diminished among the grain dealers and cultivators of Saran?—I should say there is less stored.

(Mr. Holderness).—Do they keep seed grain?—Yes, very carefully.

Do you approve of cooked food in kitchens?—Only for children and the abject. The question of caste comes in.

Would people eat cooked food if they were hard up?—Yes, but only at the point of death.

Would the lower classes go earlier?—Yes, I think Mahomedans would go quicker.

Did you see any persons on gratuitous relief? Who were they?—Chiefly women and children.

Who as a rule?—The lower class.

Would not private charity keep them going?—Private charity dries up during the scarcity.

Does it draw in at once?—People begin to think of their wives and children and then it draws in.

Does it draw in from the knowledge that Government is going to take over these people?—I don't think so. They are naturally a charitable people.

(President).—Were food-grains exported from Saran?—I cannot say.

Were fortunes made during the high prices?—I have heard that some bunniahs in Saran made any amount of money.

Was there any gambling or time bargains going on?—I don't think so.

(Mr. Holderness).—Were there any deaths from starvation?—No.

Used the people to wander about in an aimless sort of way?—Very few people, chiefly women and children; they were mostly from Azamgarh.

(President).—Did the people seem grateful for what was done for them?—Tremendously grateful. I think the agricultural loans a most useful thing. The villages which received them in October 1896 required no more assistance.

(Mr. Holderness).—Was any offer of Re. 1 made for every well dug?—Yes, and any number were dug.

(President).—Did you see anything of the attendance on relief works?—I heard about it. The grants for wells were made on the recommendation of circle officers.

Did you hear whether the money reached the people it was intended to reach?—I heard that circle officers in some cases made something out of it; for that reason I think it would be better if the circle officers were always taken from the neighbouring province.

Who were below the circle officers, between them and the recipients?—The circle officers, I believe, recommended the villages and on their recommendations the Magistrates (Sub-Divisional Officers) gave the money, but the latter were very hard worked.

(Mr. Holderness).—Did the zamindars recover their rents or grant suspensions?—I think they allowed the whole thing to go into abeyance, but they have recovered everything by now.

(President).—How did the opium crop fare in 1896?—We had a very good crop, but suddenly blight came and spoilt it. We paid Rs. 15,000 for it in Saran.

Did you make advances?—Yes, two lakhs in September, six and-a-half in April and then we made an advance of another half lakh. We ought to have had twice the crop we did but for the blight. The cultivators lost perhaps seven lakhs through the blight.

Were there any advances made for wells in the Opium Department?—That is a speciality of my own sub-division. Altogether I have made 3,543 *pucca* wells. I have mended another thousand. Last year 154 *pucca* wells were made by my department and 85 repaired at a total cost of Rs. 450.

Did all classes of cultivators take advances?—Yes.

Did the men with small holdings take advances?—It depends upon where his land is.

I suppose in case of scarcity it is a great stand-by?—Yes, one of the great helps in opium is that the man borrows freely on the crop.

(Dr. Richardson).—You said the pressure of population was a great curse. Is that pressure increasing?—Yes.

Do you propose any remedy for the relief of the pressure?—Well, they go to Bengal every year, but they all come back.

There is no permanent relief of the pressure?—No.

MR. J. G. KYPRIANIDI, Agent, Messrs. RALLI BROTHERS, Patna, called in and examined.

(President).—I believe you are the Agent of Messrs. Ralli Brothers?—Yes, in Patna.

How long, may I ask, have you been here?—For the last four years.

I suppose the business of Messrs. Ralli is chiefly buying grain for export?—Yes.

What grains ordinarily?—Linseed, rape-seed and poppy seed, in fact all oilseeds.

Any rice?—No.

Do they go to Europe?—Yes. To England for certain months, Holland for certain months, and the rest of the Continent for certain months.

Did the failure of the rains affect the produce?—Linseed was an eight-anna crop, and poppy a twelve-anna one.

Messrs. Ralli did not take up any import in consequence of this scarcity?—I could not tell you what they did in Calcutta. Here they did not.

They did not do so through their Agents?—No.

The Calcutta firms that did import grain during the scarcity only imported it, the distribution in the country was done by native firms?—Yes, I heard that a consignment of wheat was obtained from California, and also some from Russia. A part of the Russian wheat was distributed by Marwaris.

You observed the sudden high rise of prices in September and October 1896? Do you think that was a natural and reasonable rise, or do you think it was the result of panic?—I think it was natural owing to the failure of the crop in many tracts of India.

Are you able to form any judgment as to whether the stocks were low or high in the country?—I believe in Patna the stocks were much higher than people thought. The general impression was that they were very low indeed.

(Mr. Bourdillon).—In the whole of the Patna Division?—Yes.

(President).—I suppose the native grain dealers really have not much more reliable information as to stocks in the country than the officials, have they?—Unfortunately they have great knowledge, but they won't tell you anything.

If the stocks were much larger than was supposed, when the scarcity came to an end a good many people must have lost?—Yes, but they exported a great deal to the North-Western Provinces.

At the end do you think they had much left?—I cannot say, I think rice and Indian corn, which is eaten by the respectable classes, was plentiful, but *marwa* and *bajra* which are used by the poorer classes were scarce.

Would the ordinary course of trade be for the European importing house to deal with the native firms in the port, and for those firms to place the grain in the up-country markets?—I should think that European firms will principally work with natives in fulfilment of their previous contracts.

(Mr. Bourdillon).—They are merely agents?—Yes.

The European firms will not import entirely at their own risk, will they?—No.

(President).—Supposing Government made arrangements to import a large amount of Indian corn from America, and gave out that it was only going to import for kitchens and for charitable relief purposes, would that affect private trade much?—Yes, I think it would affect private trade. I think Government should not interfere with private trade even to that extent. Nobody else was likely to do it, because of the risk. The margin of profit was, at any rate, small, and that margin might disappear altogether, before the grain got to India, so it was not likely that any private trader would go in for a large import, and it was only Government who could do it.

The question is whether, if Government had done it, would it have lowered prices?—Yes, it would have affected private trade by lowering prices.

Would any firms have imported if they knew the requirements of the country?—This year no one knew what the state of the stocks was so it was dangerous for any one to import.

(Mr. Bourdillon).—Was one of the reasons the uncertainty as to the stocks?—Yes, I made all possible enquiries here but could come to no conclusion regarding stocks.

Your decision was not to touch the import trade?—I don't think my firm imported anything.

Your principle is to buy and sell simultaneously?—Our head-quarter firm contracts, and we get our orders here.

(President).—You say that after making the best enquiries you could you remained quite uncertain as to the stocks in the country. Don't you think it likely that that would influence many of the dealers all over India, and that prices would be kept high because of that uncertainty?—The native dealers have much better information than we have, because they have their coolies and *gomastas* in each village.

Only in a small area?—I should think they were much better informed of the stocks all over the country, but one cannot rely on their statements. The Marwaris are kept informed of the state of crops even in foreign countries.

Do you agree that, even if it were given out that Government was importing a large amount from America, it would greatly affect the market?—Yes, I suppose they would sell at current rates.

(Mr. Holderness).—Suppose the Government had imported 10,000 tons of grain into the Patna Division, do you think it would have made any difference?—No.

Would the import of 100,000 tons?—Yes, but prices would only fall for the time being.

(Mr. Bourdillon).—Any operation of that sort on the part of Government would have to be continuous?—Yes.

(Mr. Holderness).—Was much profit made in the import of Burma rice?—Profits were made, but not fortunes.

Were they fair trade profits?—A little above fair, perhaps 20 per cent.

Suppose prices had fallen in Patna, would they have stopped importing from Burma? Would not the margin of profit disappear?—They would stop bringing in rice, and what stocks they had they would send away to the North-Western Provinces.

(President).—Do you think that the depreciation of the rupee in relation to gold, which has been going on, has any effect in the direction of making prices of food-grains jump up quicker and higher than formerly, when crop failures occur?—No, because food-grains were not exported and exchange could not affect it.

Has there been a permanent rise in the average price of food-grains in India within the last 20 years?—Yes, but I cannot give details.

Has the rise been greater in respect of some kinds of grain than of others?—No.

What was the difference in prices prevailing in distressed districts under your observation, and in prices in neighbouring districts where the crops had not failed to such extent as to make relief necessary?—Practically no difference, owing to the failure of crops being almost general.

Were the grain dealers of these distressed tracts and of the surrounding country as active in trading in grain as you would have expected from the high prices; if not, state what in your opinion were the reasons or obstacles which impeded their activity?—Our impression is that except in Burma rice there was not much activity owing to scarcity of sellers, heavy stocks being in the hands of few sellers.

In the distressed districts under your observation could the town people and villagers, who had money but no private stocks of their own, at all times buy their customary food-grains and condiments at the rates quoted in the nearest grain marts, or had they sometimes to pay much higher?—They had sometimes to pay much higher prices owing to insufficient stocks.

Were food-grains of the common kinds exported from distressed tracts under your observation while the high prices prevailed; if so, was this due to still higher prices elsewhere or to want of capital for large purchases in distressed tracts or some other reason?—They were largely exported to the North-Western Provinces owing to the high prices or expectation of high prices there.

Were fortunes made in the grain trade during the high prices? If so, by what classes, and by what sort of trade or speculation?—Was it genuine buying to put

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on the market or of the nature of time bargain, or speculation for a rise?—Profits no doubt were made, but I heard of no special fortunes; profits were especially made by Marwari dealers or Burma rice importers.

Were the grain pits or godowns of the grain dealers for the most part opened and largely depleted at the close of the distress, or were many unopened and most but little depleted?—They were occasionally depleted and occasionally not.

In distressed tracts under your observation, had any of the cultivators and land-owners what may be considered surplus private stock of food-grains? If so, did they generally sell such surplus or hold out all they had from panic or other reasons?—Very few of them had surplus stocks which they kept for their own dependants and their own requirements.

While the high prices prevailed, did those cultivators who had grain to sell to dealers, get prices as proportionately higher than usual, as those the grain-dealers were selling at?—Cultivators were selling at little below market prices, and dealers were benefitted by the rise in the market.

Were the wholesale dealings between grain-dealers at prices as near to retail prices as they usually are?—There was only a small difference.

In such tracts have the railway and roads extended

into them, had the effect of stimulating the export of the annual surplus production to sea-ports, and to rich districts where more valuable crops are produced? When crops fail, and prices go up in such tracts, is private trade ready to import freely into them?—Naturally wherever a railway is made and communication is extended, the export trade is increased, but when crops fail and prices go up, private trade is ready to import freely.

Do you think that prices could have been lowered in any tracts by any system of bounties or loans to importers without damage to ordinary private trade?—No, I don't think it could have been done. Suppose that a wealthy man bought Burma rice and sold it at low price, this would damage private trade.

The largest export houses have, it is believed, many up-country agents in the interior, who place contracts for purchases of grain for export with native grain-dealers. In the event of India requiring to import grain, could not contracts for sales of grain be placed with up-country dealers by the same agency?—Yes.

Do you think that the offer of a bounty on each ton imported on the direct purchase by Government of grain for feeding the poor on relief works would have eased the market? To what extent would any such measures have discouraged private trade?—I don't think private trade should be interfered with by Government.

SURGEON-CAPTAIN A. H. NOTT, Civil Surgeon of Hazaribagh, called in and examined.

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I put in a written statement of evidence.

Geographical.—Information as to the extent of the area affected by distress, as well as remarks on the physical conformation of the district as it influences the fertility of the soil, will doubtless be furnished by other official witnesses from this district. It only is necessary to say that the portions affected by the famine, which nearly coincide with the Sadar sub-division, differ considerably in conformation from the more open and level country to the north and north-east of the district (comprised mostly in the Guidih sub-division), which were only slightly affected by the scarcity. These two portions also differ considerably in the general characteristics and origin of the inhabitants, the Guidih sub-division approaching much more in every way to the districts of South Behar with which its boundaries are coterminous. The remarks below may, therefore, be taken to apply in their entirety only to the wilder portions of the district and about six-tenths of the population.

Character of the population and their ethnical divisions.—In the Sadar sub-division, the bulk of the population, outside the two fair-sized towns of Hazaribagh and Chatra, consists of semi-Hinduized mixed races, varying in the same caste from close approach to the aboriginal stock in the wilder parts to but little difference from ordinary low caste Hindus in the neighbourhood of towns and main roads. Contrary to common belief, the number of real aborigines in the district is comparatively small, differing very greatly in this respect from the neighbouring district of Lohardaga. Sonthals are the most numerous class of aborigines, they number, however, but 69,245 in the whole district with its population of 1,164,321 according to the census of 1891. Kols, chiefly Uraons and Mundas, only number a little over 10,000, whereas the, in this district, nearest allied low caste of Hindus, the Kurmis, number over 71,000.

The district contains also, it should be noted, a not inconsiderable number of very poor Mahomedans, mostly Jolahas by trade, although they maintain themselves almost entirely by agriculture.

It is hardly necessary to dwell on the ignorance and superstition of such a class of people, as it is so well known. I think, however, that their most important characteristic, which, it seems to me, has a well-marked influence on their readiness to avail themselves of the famine relief measures offered to them, is a general suspicion of all measures intended for their good and the stubbornness with which they resist all interference with their habits and customs if it is not supported by force. This is only equalled by their submission when the direct influence of the police is brought to bear on them. No doubt this state of feeling has been brought about by centuries of oppression at the hands of Government and other underlings, and which cannot be said to be extinct at the present day.

No doubt, as a race, they are really lazy; but this reputation has, I think, been gained in a great measure by the exhibition of this suspicion of strangers and a dislike to turn their hands to other than the agricultural labour they have been used to. It is incredible the distaste, in the more remote jungles, the villagers have to go far from their homes, and the state of fear of being influenced by ghosts and demons they get into if they remain away at nightfall. It is unquestionable that the bulk of these people have a great distaste for anything like a task, although they will do very long hours of work in their own way in their fields. It must be admitted that it is difficult to reconcile the above opinion with the readiness they show, when driven to extremities, to emigrate, making, I believe, in Assam very good coolies; the fact of being enlisted by their own relatives appears to be the explanation.

Character of the food-supply.—This is an extremely important matter to consider in any question of famine relief in Chota Nagpur. For a description of the various kinds of jungle, non-cultivated foods commonly or unusually eaten by the poorer classes in this district, reference is made to Hunter's Gazetteers, Volume XVI, Hazaribagh District, page 47, in which an extract from an article written in 1867 fairly describes these jungle products which are used as food in the present day. I have given much attention to this point, not only during the year of famine, but before; and I have satisfied myself that a large proportion of the inhabitants, as much as over one-half of the total population of the district, at some time or other in the year, make use of some of these articles as an important part of their diet for varying lengths, even during the best years; but very considerable variation takes place from year to year in the length of time as also in the numbers eating such diet.

In an ordinary year the diet of an ordinary low caste proprietary cultivator with a very small holding or a day labourer will be something as follows:—

From August to November he eats *makai* (Indian-corn) *gundi* or *marua*. From November to February it is mainly rice, but varied with the inferior grains above mentioned, and aided by the fruit of the *baer* shrub and the leaves and pulse, only partly ripe, of the *sia* plant, a leguminous cultivated plant, which in this district almost invariably surrounds the house enclosures and is an important food supply.

From March to June rice is only taken very occasionally; dependence is placed on the dried corollas of the *malua* flower after being cooked together with seeds of the *sai* tree. Probably, however, only in times of famine does he live for any considerable length of time without an admixture of rice.

After the commencement of the rains I believe it is the general rule for the food to consist of rice, *makai* or *marua*.

obtained either as an advance from the *mahajan* or as wages from daily labour.

Throughout the year large quantities of vegetables are taken, partly obtained from the small patch of cultivation round the labourer's cottage, but chiefly wild from the paddy fields and neighbourhood of tanks, etc., and known generally as *sags*.

Looked at from a physiological point of view, the diet ordinarily taken in this district is very deficient in nitrogen, inasmuch as pulses (*dals*) are but rarely eaten, and, except by those castes who eat pig, meat is equally absent from their food; fats also are deficient, though, as compared with other more civilized districts, not so seriously. On the other hand, vegetables are largely consumed, though the antiscorbutic and nutritive value of most of them appears to be very small. Condiments and salt are taken in fair quantities. Many of these people consume large quantities of alcoholic liquor, especially during years of prosperity and much of their available cash goes in this way: *darrhu*, the distilled spirit from fermented *mahua* flowers, being the drink of the district. It must be conceded, provided the amount of jungle-produce consumed does not exceed the above estimate, that such a diet is compatible with ordinary good health. It is notorious that under ordinary circumstances the population of this district appears well fed and even fat; but the physique of the lower orders is generally poor, and they are certainly unable to withstand unhealthy seasons. The death-rate at times when fevers are particularly prevalent often is a very high one. The real aborigines, particularly the *Sonthals*, although low in stature, are much more muscular and have bigger bones than these mixed races: this may be due to their habitually eating more flesh.

Mahua, the chief mainstay in ordinary years during the hot-weather months, cannot possibly be considered a satisfactory human food in itself; presumably its composition is grape sugar and a little vegetable fibrous tissue with an almost total absence of any digestible nitrogen. It must be distinctly inferior, though similar, to a purely rice diet.

The "*Khamia*" system: its effect in times of scarcity.—It is perhaps generally known that a species of slavery or serfdom is extant in this district, men giving their personal services, and that of their sons after their decease, in lieu of interest on a debt, receiving a subsistence allowance in kind from their masters. It has been thought that advantage in times of distress was derived from this, in that, from purely commercial motives, the serf would be maintained in health. As the result of enquiries I have made on this point, I have come to the conclusion that during the recent famine the condition of the greater number of these people was no better than that of ordinary day labourers. It is, I believe, by no means the custom for their masters to feed these *khamias* at the time of the year at which agricultural operations are in abeyance, and very few, I believe, whilst working in the last rainy season, received other than the inferior kinds of grain or *mahua* to subsist on. The condition of those who receive a rupee or so a month from a village *mahajan* to support themselves must have been worse than that of their free fellow-labourers.

DEPARTURES FROM THE PRESCRIPTIONS OF THE BENGAL FAMINE CODE WHICH HAVE OCCURRED IN THE DISTRICT DURING THE RECENT FAMINE.

Are not touched upon.

DEGREE OF SUCCESS WHICH HAS ATTENDED THE MEASURES ADOPTED, CONSIDERED PRIMARILY WITH REGARD TO THE RELIEF OF DISTRESS AND THE SAVING OF HUMAN LIFE, AND SECONDARILY WITH REGARD TO ECONOMY.

Extent of distress as shown by the sickness and mortality.—In the affected tracts, with the exception of the quite helpless portion of the population, viz., those at any time unable to work and without relatives ready and willing to maintain them, little general harm was done until the month of June. Without question, very long before this, a very large proportion of the populace in the worst affected and poorest parts of the district were in great straits; they were living from as early as the beginning or middle of January almost entirely on jungle products and on the leaves and seeds of the *sims*; but with a sufficient crop of *mahua* coming on in March, they were only a degree worse off than in an ordinary year, and the season being, during these early months, a particularly

healthy one, little or no effect on the death-rate was observable. However, even as early as January, to my eyes during my tours in the district, it was distinctly observable that there was a general loss of condition which did not apparently affect the health. But after the month of June there can be no question that until the earlier *khadoi* crops had been for some time generally available, i.e., till after the end of August, the villagers were generally in a thoroughly weakened and famished condition, the diet they were then eating being practically quite innutritious, with the result that the death-rate became exceedingly high, continuing so throughout the next two months. Two factors, however, have to be considered in this connection which had an effect on this: (1) the epidemic of cholera which ravaged the district from the month of April until October, but chiefly in the months of July and August; and (2) the unquestionably extremely unhealthy character of the three months, July to September. From observations on the better class of inhabitants quite unaffected by the scarcity and on the large number of prisoners in the Central Jail, who had been transferred, long before the famine commenced, from other quite unaffected districts, it was quite evident that, in great contradistinction to the previous year during the same months, bowel disorders and fevers were extensively prevalent. It is easy to eliminate these factors with regard to cholera, the registration of deaths taking count of this; although it is probable that some deaths from starvation dysentery were returned as cholera; in fact, reports of Hospital Assistants on cholera duty pointed to this. If deaths from cholera were omitted, as is generally believed to be the case in cholera epidemics, they were omitted altogether, and not erroneously entered under other headings, the fairest way to eliminate the results of the bad season, pure and simple, although the unfavourable climatic condition during the rains doubtless was in nearly all cases a powerful factor in leading to the fatal end, is to compare the year with the year 1894, which was in many ways identical in this matter of unfavourable climatic conditions, but succeeded a very good harvest. Thus, subtracting the deaths registered from cholera in both years, the difference between the remainders fairly represents, I think, the excessive death-rate due directly to the famine; whether or not the cholera epidemic was indirectly due to this is open to much question. This calculation for the whole district would show that about 6,000 deaths were fairly directly due to the prevailing scarcity, as shown in the table in the margin; this is equal to a death-rate of about 5.50 per thousand. The fairness of the estimate will be evident when it is stated that the death-rate in 1894 was 39.55, considerably the highest death-rate in the ten years previous to 1897.

Marginally also is shown the total deaths in the thannahs which were declared to be affected by famine, also deaths excluding cholera, and this is compared with the average for five years. Further details will be obtained from the tables in the official Famine Report, though it will not agree in the period covered. I have thought it will be more correct to give the figures for the calendar year 1897, and not from October 1896 to September 1897.

The conclusion from the above is that there was a considerable, but, taking the circumstances of the population into account, an unavoidable, loss of life more or less directly due to the famine, and that it was entirely confined to those months during which agricultural operations are in progress, but in which, presumably, stocks have run to their lowest, and it was due to the now well-ascertained fact that the various fruits and *sags* available during this period are, probably from their excessive moisture, quite unfit as articles of food, to maintain life in health, and are especially liable to set up dysenteric symptoms in people weakened by living for many months on inferior diet. The most disastrous period in its results was, I believe, the fortnight to three weeks previous to the 12th of July, during which period a remarkable break in the rains took place, causing an almost total sudden cessation of field labour, and raised fears of further disaster amongst the landowners who had grain at their disposal for payment of day labourers. Before this time even the comparatively few who had attended relief works had left on the commencement of the rains. I had many opportunities of arriving at the conclusion that the food eaten particularly by the aboriginal and nearest allied castes was at this period only acting

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District as a whole—	1894.	1897.
Total deaths	46,073	56,036
From cholera	2,790	6,306
	43,273	49,860

Affected tracts—	1896.	1897.	Average of five years 1892-96.
Death-rate	34.21	52.88	32.95
Excluding cholera	33.63	46.00	31.09

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as a foreign body in the intestines, power of digestion having almost entirely failed. I found it necessary, at the Central Jail, at this period, to feed all under-trial prisoners on milk and sago alone for several days after their admission, the ordinary diet, specially the *dal*, being quite indigestible, leading to much dysentery. I have also many doubts whether *mahua*, after it has been kept into the rainy season, is a wholesome food. I am certain that the fruits of the plum tribe, such as the "jamun" are distinctly harmful; the same in a less degree applies to the *sags*, particularly the various species of *sorrel* found wild at this time of the year. The disease of which the people died was an irregular diarrhoea with occasional mucoid and blood-stained stools, particularly noticeable by the constant accompaniment of œdema with marked œdema of the hands and feet. It was in many cases attributed to the eating of new *gundli* and Indian-corn after months of starvation, but occurred certainly extensively in the month preceding the ripening of these grains.

Effect of the measures adopted to meet the distress.—*Relief works* attracted but very small numbers in comparison with those actually in distress; and those people it did attract were, so I formed the opinion, of a class who would most likely have succeeded in weathering the storm by obtaining sufficiently remunerative labour elsewhere, being of the more industrious and less ignorant classes. The automatic system of test-work as a means of determining the amount and area of actual distress is, in my opinion, inapplicable to this district for the purpose intended. I am quite convinced that it is quite unsafe to come to the conclusion that there is no distress of sufficient severity as to require active measures of relief if test-works, or relief works even, are poorly attended. I am quite sure, under the rules of the Bengal Famine Code, or any slight modifications of it, that even in the severest famine imaginable the distressed people will not attend the works in any numbers sufficient to make any material difference to the general body of the people. In the preliminary remarks on the characteristics of the people I have endeavoured to show the reason of this.

Relief kitchens were started at a few centres, particularly at Hazaribagh itself, and on the Grand Trunk road at an early period of the famine, almost at the commencement of 1897, and later on were much increased in number, more than one in each thana being opened. The management was largely entrusted to non-official hands with much success. These institutions appeared to me to answer a very useful purpose; at first they afforded relief to starving way-farers coming from or returning to the North-West Provinces; later the large beggar class who could no longer depend on private subsistence were relieved, and numbers of women whose husbands had temporarily emigrated and children more or less without natural supporters were kept from starving. Under the circumstances that existed, when men and women apparently well able to work would not come to the relief works, there appeared no alternative between some test of necessity, which the breach of caste restrictions and the discomfort of attending a relief kitchen gave, and wholesale gratuitous relief.

Poor-houses.—One poor-house only was established, but it was at the close of the famine when cheaper food-grains were everywhere available, and was used as a means of closing the relief kitchens without risk. I am convinced that the use of the poor-house as a means of testing the needs of any class of people in this district as to their suitability for gratuitous relief would be quite out of the question. A vast majority of those who attended the kitchens even would have preferred to take their chance by begging to the restraint of a poor-house.

I do not for one moment believe that any extension of the poor-house, relief centre or relief kitchen system could meet the necessities of a very severe famine; with compulsory powers of confinement in a poor-house, these means used for different classes of the people would form necessary and extremely valuable links in the chain of defence, but they could not affect the people in distress as a whole.

Health of people receiving relief.—As there was no residence on any of the relief works, the people returning at night to their own homes, no sickness was noticed, nor was there reason to believe it arose from congregation together at works, in fact, at no time was there any greater congregation than at ordinary road-repairing work in ordinary years. Many fears were entertained that evil results would arise from the meeting of beggars, cripples and sickly people generally together at relief kitchens. The numbers at one time threatened to render them unmanageable; but although no less than 800 were at this time relieved at Hazaribagh alone, and cholera was prevalent in

the neighbourhood, but few cases of cholera actually occurred amongst them. It, however, is fairly certain that the severe epidemic of cholera, which caused a death-rate of 3 per cent. from this cause within the municipal area, was introduced by the gathering together in the town of the needy for miles round. Before this, however, the numbers on relief at the kitchen had been materially reduced by the substitution of doles in money and kind.

ADVICE AS TO THE MEASURES AND METHODS OF WORKING WHICH SEEM LIKELY TO PROVE MOST EFFECTIVE IN FUTURE IN THOSE TWO RESPECTS.

From what has been said it may, I think, be fairly concluded that (1) the poorer classes of the people, ordinarily living for a considerable proportion of the year on jungle products, the failure of one of which, *mahua* only, would be serious, are able to pass without serious injury through periods of scarcity which in other districts would eminently call for organized relief: but that there is a point at which the most serious consequences will result. In the recent famine this point was all but reached; had there been a comparative failure of the *mahua* crop, it is certain the condition would have led to entire depopulation of many villages in the more remote parts, and nothing, unless this had been recognized long before, could have prevented it. Taking it altogether, the advantages of this cheap supply of food are much over-estimated, and it has many serious disadvantages in view of famine management. (2) That the general characteristics of the people are such that they will go on, as a rule, with these helps, such as they are, without seeking aid at relief works, kitchens or poor-houses until they are unfit for work, and will then uncomplainingly remain in their houses to die. That starvation is not a pure and simple dying for want of food, inasmuch as these jungly people usually can obtain sufficient food to stay their hunger, but without nourishing their bodies, leading to a slow death by starvation dysentery. In this connection I feel sure also that payment in money, however high a rate in reason is given, will not lead people, who have been used to obtain rice at 18 or 20 seers to the rupee or not to take it at all, to purchase it at the rate of four or five seers to the rupee. They will most certainly purchase inferior grains or *mahua* instead. What therefore is to be done, taking the people as they are? I must admit I fail to see any but two plans both most objectionable: these are either wholesale gratuitous relief to able-bodied men and women, beginning long before there is any evident need of it, and preferably in grain; or otherwise to make attendance at relief works compulsory, payment to be made principally in grain. It must be admitted that the former would, considering the sparse population, be extremely expensive, since an enormous staff would be required; but, on the whole, it appears to be more feasible than the latter, although it is to be remembered that the power of the "Sarkari hukum" has yet, and for many years will have, great force in this district. On the whole, therefore, I would advise that the most careful enquiries by all possible means should be made to arrive at the real truth as to the material condition of the people, and that if it is satisfactorily shown that practically the whole of the village population has been living on jungle products without a reasonable admixture of rice from as early as January, a famine should be declared. I am of opinion that it is useless to rely on test-work as stated before. This having been so determined, it would be necessary to compel the people, whose caste will permit (*i. e.*, nine-tenths at least of the population), to attend relief works from the month of April until the middle of June. These works should then be stopped, and gratuitous relief given in the villages themselves for another six weeks. I believe it impossible that there can be a famine which would require longer general relief, especially as it unnecessary at an earlier period. Accordingly, as shown by the condition of wanderers and beggars, relief kitchens and compulsory poor-houses should be opened early in the year. It is probable that until the present famine there has been no year of scarcity which required any serious attempt to relieve it, and everything therefore depends on the judgment as to whether there is a necessity to do anything or to leave all but the quite destitute to their own ways.

OTHER RECOMMENDATIONS OR OPINIONS THOUGHT LIKELY TO BE USEFUL IN CASE OF FUTURE FAMINES.

Taking it for granted that in a future famine of great intensity the many thousands, who in this time of scarcity just passed, lived for at least six months mainly on jungle products, would somehow or other require to be fed for at least three months on rice, the question of supply arises.

We may be quite sure that with the present means of communication the whole wheeled and pack transport of the district would absolutely be unable to convey one-tenth part of what would be required. The consideration of this question goes outside my particular province, though I may add my voice to that of others who see in this the necessity of much increased railway communication. A consideration, however, of the prevailing prices during last year in the bazars of Hazaribagh and Ranchi which reached the highest figure of any Sadar town in the province, except in the neighbouring district of Palaman, still further removed from the railway, shows this.

ABSTRACT OF CONCLUSIONS ARRIVED AT.

1. That there was much distress and a distinct increase of mortality as the result of the famine of 1896-97.
2. That this was due to causes unavoidable in managing a famine amongst uncivilized, semi-aboriginal races having other food-supplies than from cultivated lands.
3. That test-works are inapplicable for the purpose of finding out whether there is distress or not present.
4. That other means than those at present in force must be taken to compel or induce the distressed people to attend relief works. Partial payment in grain according to their customs will to some extent answer.

(President).—I think you are Civil Surgeon of Hazaribagh?—Yes.

How long have you been in the district?—Five years.

Have you any knowledge of the other districts of Chota Nagpur?—Very little, what I have has been gained from conversation.

(Mr. Holderness).—You were in charge of the medical arrangements throughout the scarcity?—Yes.

Did you see the people during the time?—I saw a great deal of the people during the time.

When do you think they began to show signs of suffering?—They could be divided into two classes, the small minority of quite helpless people showed signs of want as early as December 1896 or January 1897; but the people as a whole showed very little signs till June 1897. I should say the people as a whole were thinner than they are ordinarily, but still appeared in good health and fit to do their usual work till after the rains commenced.

Was there any change in their diet up to June?—Their diet was rice till about January with the addition of "baer" (wild plums) and other less known jungle fruits.

They ate less rice than usual?—Yes, up to the end of February it is usual to live on rice entirely. They lived on *marua* and jungle produce.

Do you think for some months a considerable part of the population was living on jungle produce?—I believe half the population was.

Were relief works opened?—Yes, quite from the beginning, all over the district.

Did they fill?—People would not go to them.

Was there gratuitous relief?—Yes, considerable relief in the form of kitchens all over the district. Hazaribagh is to the forefront in the matter of kitchens. That was practically the only form of relief. Alterations were made in the method of relief, but nothing succeeded in attracting the people to the works.

Kitchens were the chief form of relief?—Yes.

Did people go freely to them up to June?—Yes, but only a special class.

Did the people prefer the jungle products?—Yes, if able-bodied men did come to the kitchens they were told to go to the nearest relief works and then they went off.

When did the high rate of mortality begin to show itself?—It was entirely in July, August, and September. In July it was 5.34, in August 10.51, in September 6.59, in October 4.96, in November 4.23, and in December 2.46. This includes cholera.

In December it again became normal?—Yes.

When mortality was seen to be rising were any special measures taken?—Endeavours were made to induce men to come again to relief works and to kitchens, but it was found to be impossible. The circumstances of the district are such that at the time the condition was not fully appreciated. And besides, it was some time before the increasing mortality was noticed.

(Dr. Richardson).—Do you connect the death-rate with the scarcity?—There were other causes which accounted for it to a large extent, but not entirely; there was the unhealthiness of the season and cholera.

Do you think this high death-rate was unavoidable?—Under the circumstances unavoidable.

(Mr. Holderness).—Do you think that such distress could not be adequately gauged by test works?—I am convinced that with people of that class test works do not answer the purpose they are intended for.

Do you say the same of relief works?—Yes.

Can you suggest any way of reaching people like those?—I have no suggestions to make. You cannot compel the people to go on to relief works, but I am convinced that no other means will make them come in anything like sufficient numbers.

Do you think it would have been advisable to have more kitchens in June and July?—I do not think more people would have taken the cooked food than did. I do not think that that could have been made to meet the difficulty.

Was there much wandering in the district?—There was a good deal of wandering on the Grand Trunk Road; the local wandering was not very large.

Did you see any starvation deaths?—I saw no deaths from actual starvation.

Did you see any bodies in a very emaciated condition?—Yes, many wanderers.

Could it be presumed that they had died indirectly from insufficient food?—From improper food.

What is the effect of this jungle diet?—It tells suddenly, especially if an unhealthy period comes on. It sets up a dysenteric diarrhoea. When once that has started they never recover. I have treated a great many cases but had to give them up as hopeless. I have completely failed to save a man after the disease had reached a certain length.

Did people come to poor-houses in a state when you could not do any good to them?—There were many wanderers picked up on the Grand Trunk Road in this condition.

Do you think some cases which were returned as cholera were really dysentery?—I think so, but there was a very severe epidemic of cholera in July and August.

(President).—If you put cholera aside, were many of the cases returned as fever?—Yes, most of them.

(Mr. Bose).—If relief works are opened near the houses of these people, do you think they would still keep away?—Relief works, or rather test-works, were generally opened next door, but they would not go.

Would they come to piece-work?—I don't think any alteration would have brought them. Any modifications might increase the number, but it would never bring them in sufficient numbers to have any effect.

(Dr. Richardson).—Was there not a big residuum of orphans left?—Not a very large one. Only some score.

You don't think poor-houses would have any effect?—I don't think they would go into poor-houses without compulsion; the people are very conservative, and it is extremely hard to turn them out of their everyday course.

(Mr. Holderness).—Food prices were very high, were they not?—Yes.

But it was always possible to get food?—Rice was always obtainable.

What did it go to at the highest pressure?—I think six seers or perhaps four or five chattaks less. It may have touched five.

Did the Government import any?—No, they did not. The local *mahajans* were equal to any demands that were made, at a price.

(President).—You say in your written evidence you believe these *khamias* received no other than the inferior kinds of grain to subsist on during the last rainy

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people of different castes should be placed in separate rows.

(5) *Other measures of relief.*—In this country there are certain classes of people who would rather starve than go to relief works or accept gratuitous relief. For such people the best plan is to make advances in food grains on the security of their immoveable properties (lands, houses, trees, etc.). By adopting such a course, as was done by the Raj, we can easily relieve "respectable destitution," a class that could not be otherwise effectively relieved. Such advances, or rather the value thereof in cash, to be recovered from the people by instalments in succeeding favourable seasons.

(6) *Advances for village improvements.*—Paragraph 200 of the Bengal Famine Code makes provision for placing money at the disposal of a landholder or a village headman, for the purpose of being used for the employment of labour under *famine relief conditions and restrictions*, for digging tanks or wells, or for other village improvements, the landholder or headman undertaking to repay the amount wholly or in part according to his interest in the work. But I am afraid the landholders or headmen, when left to themselves, would not be able to employ labourers under *famine relief conditions and restrictions*. Unless, therefore, these conditions and restrictions can be done away with, it would be better not to give them such works, but to entrust them with making grain advances to the raiyats, they themselves undertaking to repay the money value of such advances and making their own arrangements for recovering the advances from their raiyats.

(d) OTHER RECOMMENDATIONS OR OPINIONS THOUGHT LIKELY TO BE USEFUL IN CASE OF FUTURE FAMINES.

I think the suspension of the land-revenue in cases of severe famines is necessary, especially in the case of petty landholders, on condition that they suspend the collection of rent from their raiyats.

(*President*).—You are, I think, one of the managers of the Hutwa Raj?—I am Assistant Manager.

Have you been long in the employ of the Hutwa Raj?—For fifteen years.

You say in your written note on the departures from the Code, that there was a reduction in the rates of maximum wages of able-bodied male adults, from 21 to 19 chataks of food-grain. Do you think that this reduction was right?—Well, I think that was not sufficient for subsistence. Any able-bodied labourer usually takes 21 chataks.

In the Hutwa Raj was relief conducted by the Raj officials entirely?—Yes, but there were also two Government officers who were employed as charge superintendents.

(*Mr. Bourdillon*).—Were they under the orders of the Collector?—Yes.

(*President*).—Was everything done under the orders of the Government of Bengal?—Yes, the estate was then under the Court of Wards.

I see you are opposed to piece-work?—We did not try the piece-work system much until latterly, and then only for closing the works when the rains came. We always used the task-work system.

If you set a task to a squad, as you propose, consisting of from 12 to 16 persons, and suppose of these 12 or 16 persons two-thirds are willing to work and one-third not willing to work, how can you tell whose fault it is?—The mate whom we employ to superintend would be the best judge.

But it is not likely to encourage the industrious men if they were put to a task with a lot of lazy men, is it?—Those who are lazy would get a penal wage; they would then begin to work properly.

You say that in all poor-houses there should be separate enclosures for the residence and feeding of males and females, and people of different castes should be placed in separate rows at meals. Was that done by the Hutwa Raj at all?—Yes, we did it. In the Famine Code orders are laid down that in very severe famine, separate enclosures should be made, but in the case of ordinary famine there are no express rules.

Supposing a man goes with his wife and daughter, does he prefer to dine with them, or apart with the men?—I think he would not object to the separation.

Were not people of different classes kept in separate rows according to caste?—There is nothing said in the rules, but we did follow that plan.

In spite of these arrangements, were the people very reluctant to go to the poor-houses?—Yes, the higher classes never came.

Did the people of low, but respectable classes come?—They also objected. The attendance was generally confined to *Chamars, Joláhs, Dosads*, and sweepers.

Did the Raj import a large amount of food-grain?—Yes.

What grain?—Only rice.

Was it Burma rice?—Burma and Orissa rice.

What was the amount?—105,000 maunds.

How was it disposed of?—We gave it as advances to people who would not go to poor-houses and relief works, on the security of their lands. It had to be repaid in three instalments.

Was it repayable in grain?—No, in cash. We charged cost price.

Did not the grain-dealers of the place complain that this was injuring their business?—They did not complain, but this helped to keep down the rise in prices.

Do you think that, but for that action of the Raj, local dealers would have imported more than they did?—I think so.

Do you think that they would have imported as much as the Raj?—I cannot say exactly. Probably they thought the Raj had imported more than it actually did.

They did import some though?—Yes.

You did not supply nearly all the demand?—No. It was confined to our own raiyats.

You recommend the suspension of the land revenue of petty landholders in case of a severe famine. What do you call a petty landholder?—One paying a revenue of about Rs500.

(*Mr. Bourdillon*).—Out of the 105,000 maunds of rice you imported you distributed about 85,000 maunds. Did you not?—Yes.

(*President*).—Do you think stocks in the country were very low, or were they larger than was generally thought?—We could not exactly make out. It was very difficult to ascertain. There were some stocks no doubt, or they could not have carried on.

Did you ever hear of any village or hamlet where the local bunniah's stock was exhausted and the people could not buy grain, even though they had the money?—No: grain was procurable all over the country.

Were the prices of those bunniah's shops practically the same as in the market towns?—No, the prices in the interior were higher.

Did prices vary much from day to day?—Not very much, though during the famine prices used to rise very high.

Who are the people who really fix the prices. Is it the leading man?—Yes, and other people accept them.

Do you think they do it on any system of calculation, or merely hear what is going on, and then judge on the spot?—I don't think they get any information from outside. We have a large market at Mirganj near Hutwa, and they judge from the quantity that comes into it.

It is arbitrarily done, I suppose?—Yes.

As much as they think the market will stand?—Yes.

(*Mr. Bose*).—Do you think that people of the same caste should be kept in separate compartments in a cook-house wherever it is practicable to do so?—So far as residence goes I do not think it is very necessary.

As regards the instalments of grain advanced, do they carry interest?—We do not enforce the interest unless we are obliged to go to Court. Ordinarily we charge no interest.

Do the suspensions of rent carry interest?—I think they should not.

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Mr. A. W. STARK, Sub-Divisional Officer, Godda, Sonthal Parganahs, called in and examined.

I put in written answers to the Commission's questions.

*1. In the Jamtara Sub-Division the area affected was 367 square miles. The population of this area is about 93,000.

2. The distress was due to the failure of the winter rice crop owing to failure of the rains. The rains set in late, so that planting of rice was retarded, and as they ceased early, a great deal of the rice withered away.

Prices were abnormally high, but this was due, I think, to the failure of the rice crop, both in the area reported and elsewhere. The *rabi* crops also failed.

3. (a) The rains ceased prematurely in the month of September, and the outturn of the winter rice was from 4 to 6 annas. The later crops, such as *kurthi* and mustard, were an entire failure. The rainfall was 51.11 inches, against an average of 60 inches.

(b) Prices of food-grains were much higher than in ordinary years. Indian corn and cheaper grains could not be purchased as there was none in stock, and the price of coarse rice rose to 7 seers. In previous famines, I am informed rice has sold at 6 seers, but in the famine of 1874 it never rose beyond 10 or 12 seers.

4. The condition of the affected area was not good previous to the failure of the rains. The winter rice crop of 1895-96 was a short one, and hence the people in the affected area had little or no food-grain in their houses. The crop of 1894-95 was a good one.

5 Under normal circumstances the population of the affected area may be considered to enjoy a fair measure of material well-being. There is no section of the population which from special causes is in ordinary seasons in an unsatisfactory and precarious condition.

6. The agriculture of the affected area is specially dependent on timely and sufficient rain. This is owing to the undulating and stony nature of the surface, which causes a quick drainage of water from the fields, followed by rapid withering of crops in case of failure of timely rain. There are no large reservoirs or canals for irrigation.

7. The population of the affected area generally have not any reserves of money or of food. They simply have enough food-grain to carry them from one harvest till the next, and in case of the failure of one harvest, they have to resort to the *mahajan*. The smaller ryots have not much credit with *mahajans*, and in case of failure of crops, must rely upon obtaining employment till the next crop. About one-tenth of the population of the affected area may be said to be so situated.

8. The late distress was far more severe than the distress during the famine of 1874. It is said to exceed in severity the famine of 1866, but of this latter I am not in a position to speak from personal knowledge.

9. The extent of crop failure was not over-estimated nor the degree of distress. In fact, distress began to be felt earlier than anticipated, and relief had to be given soon after the end of the cold season.

10. In my experience the number of persons on relief in the worst months of the famine did not exceed 5 per cent., but this low percentage is attributed to the character of the Sonthals inhabiting the affected area, who can live on jungle produce and herbs of the field, and many of whom obtained employment in the collieries in the vicinity of the affected area.

11. Not having the figures before me, a reply cannot be given, but I think the figures are greatly below the standard of the Famine Commission. The reason may be the same as that given in paragraph 10.

12. I do not think the total population relieved was larger than was necessary to prevent loss of life or severe suffering.

There were a few instances of persons able to work who at first attempted to get gratuitous relief, but those persons were rarely successful owing to the strict supervision of gratuitous relief.

13. There were some cases in which severe suffering was undergone by certain classes of people, such as Baotis, Domes and Mohas, who for a long time resisted attending the relief works, and persistently tried to get gratuitous relief. These persons were themselves to blame, as there was sufficient employment on relief for all who were willing to avail themselves of it.

14. The relief arrangements were adequate.

15. The relief given has been successful in its object.

The vital statistics are not before me, but so far as I remember the death-rate is slightly in excess of the normal. This is attributable to an epidemic of cholera towards the latter part of the rainy season. I do not think this could have been prevented by more extensive relief measures.

16. The introduction of the piece-work system in May last was followed by a large decrease in the numbers on relief works, and as the numbers were increasing again the rainy season set in and relief works were closed. I do not think such change had the effect of excluding needy persons from relief or bringing on the relief persons who were not in need of relief. The change was made rapidly, and there was very little difference in rates between the task-work system and the piece-work system.

17. No.

18. The prescribed tests were strictly applied, and to the fullest practicable extent.

19. Yes, labour was strictly enforced from all able to work.

20. Yes.

21. During the time relief works were open the number of destitute persons to whom the test of labour could not be applied was comparatively small. Not having the figures before me, I am unable to quote them.

22. The task has been a full one, the wage has been a bare subsistence wage.

23. Relief works were opened at five centres in the distressed area. The workers camped out in the vicinity of most of the works. Those who resided close to the works, i.e., within a distance of five miles, usually went home at night and returned to work the next morning.

Residence upon a relief work is disliked by cultivators who are not given always to working away from home, and in the case of these persons it is a fair test of necessity.

24. The papers not being before me, I cannot give statistics.

26. When relief works were first opened, there was a great rush of labourers who thought they were to receive full wages although they did not complete their tasks, but the numbers fell off as soon as the people found that full tasks were enforced. This eagerness was not due to the greater liberality of the terms of relief as compared with those in force in former famines, but because the people expected a repetition of the liberal terms of former famines.

27. Gratuitous relief was mainly given in the form of weekly doles of grain to persons in their homes.

28. There is a risk of too free a grant of relief in the homes of the people, but this was reduced to a minimum by careful enquiries made at an early stage of the relief operations. There were few instances in which persons not really deserving of relief obtained it. There is no doubt that many helpless persons who would otherwise have been maintained by their relatives were put upon gratuitous relief, but it is difficult to distinguish such cases and much suffering would be caused if all persons having relatives or friends were refused gratuitous relief.

29. Gratuitous home relief has been given more sparingly in this famine. It has had the effect of saving many helpless and diseased persons and cripples who would otherwise have died. I do not think it has had the effect of keeping villages and households together as it was not given to any but the really helpless persons dependent on their relatives and friends. After the closing of relief works, gratuitous relief was more freely given to able-bodied persons unable to obtain employment. In such cases I believe harm has been done by the people being made more accustomed to begging.

30. As the papers are not before me, figures can not be given. The cost is about ₹30,000 so far as I remember.

I believe, having regard to the severity of the famine and its long duration, relief has been economically administered. The expenditure is considerably below the estimated amount, ₹60,000.

31. Indirect relief has been given in the form of loans to several persons under the Land Improvement Loans Act, and to cultivators under the Agriculturists' Loans Act. The amount so advanced is about ₹15,000,† so far as I remember. A sum of about ₹5,000 was also

* The numbers refer to the questions drawn up by the Commission.

advanced to the relief workers from the charitable fund in the shape of seed grain. I am unable to compare such relief with similar relief in former famines, but I am of opinion that at the famine of 1874 advances of rice to a much larger amount were given to land-owners and wealthy cultivators for distribution to those in need.

32. The net result of the famine has been to prevent the land-owning classes from realizing the rents due to them in full, but they will not feel more than temporary inconvenience from this. The cultivating classes have been more seriously affected. Many of them have had to resort more freely to the money-lender, but as they are secure in their tenures, they will soon recover and regain their former position in two or three years, if the harvests are good.

Agricultural labourers and artisans have not been appreciably injured.

33. None that I can see.

34. Yes. So far as the Jamtara Sub-Division is concerned. I cannot suggest any improvement.

35. Information regarding the cropped area is obtained from the circle officers who report, when necessary, the area approximately under crops. The Kanungo, too, makes enquiries when moving about the sub-division. Reports regarding the condition of the crops are obtained from the circle officers and Kanungo, and the Sub-Divisional Officer himself, when on tour, sees the crops.

36. As regards heads 1 and 2, the information cannot be accepted as accurate, but as regards head 3, the information is fairly accurate.

37. Yes.

38. Yes.

39. The measures of State relief were, first, relief works; second, gratuitous relief to dependants of relief workers; third, gratuitous relief to helpless persons at their homes; fourth, distribution of cooked food at a kitchen at headquarters. The food was given chiefly to children and old persons and to starving way-farers.

Private relief was given by two Missionaries, Messrs Corneliens and Rowat. They employed large numbers daily on road and tank work, and also distributed money or grain to large numbers of persons unable to work.

40. I began the relief operations myself and carried them on for some time, and so I gained a practical knowledge of the working of these measures.

41. The measures adopted were all authorised by the Famine Code, but the provisions of the Code as to the manner of working were not carried out in the following particulars. The labourers were not classified according to section 61 of the Code.

Gangs were formed under section 63, but tasks were not set for the whole gang as directed in sections 65 and 66.

It was found that the labourers in a gang refused to perform a common task, so they were divided into diggers and carriers. A man was required to dig from 100 to 121 cubic feet of earth and was allowed a woman and a child to remove the earth up to a distance of 60 feet. Wages were not always calculated in accordance with the provisions of the Code.

Relief workers were permitted to work on Sundays if they wished to do so. No huts were made for the relief workers. They camped under trees or in the villages near the works. No hospital accommodation was provided at the relief works.

42. The piece-work system was substituted for the task-work system towards the end of the relief operations.

43. It was not found possible to classify the labourers. Most of them being persons accustomed to labour, it was found convenient to make them all of one class. The officers in charge of the relief works had not the necessary discrimination to permit of the classification of labourers by them?

The people refused to perform a common task, and so a system closely resembling individual tasks had to be adopted.

It was not necessary to pay full wages always, as the relief workers were able to supplement the rice ration they purchased with *mahua* flower and jungle produce, which they are accustomed to eat with rice.

44. The piece-work system has no advantages over the task-work system as regards the relief of distress and saving of human life. But it is comparatively cheaper as it is not necessary to have such a large paid agency to supervise the work.

I have found on the other hand that piece-work requires closer supervision than was at first thought necessary. The workers, in order to earn as much as possible, work carelessly, and there is not the same neatness and finish in piece-work as there is in task-work. In order to have the same finish, it would be necessary to spend a considerable sum in dressing the roads done on the piece-work system.

45. I think instead of doing piece-work by means of petty headmen, respectable men might be employed as contractors to carry out relief works on a large scale. Rates should be fixed and the contractor obliged to pay the workers at these rates. It would be to the advantage of the contractor to keep the relief works alive and contented, and I am not aware of the reasons why contract work is forbidden. I certainly think it would be more economical and Government would be saved the expense of a large temporary agency who are frequently corrupt. The work turned out would also be just as good, if not better, than that obtained under the piece-work system.

46. See answer to 45.

47. All the roads constructed in the Jamtara Sub-Division will be of permanent service to the community if they are completed by culverts being constructed where necessary. I believe they will be effectively maintained.

48. I consider there is still room for new roads. The length of roads still to be made in the affected area is about 50 miles.

49. Metalling of roads is not required in the Jamtara Sub-Division.

50. No metal has been collected.

51. I. As a means of employment of relief labour village tanks are very useful.

II I am doubtful of the permanent benefit conferred on villages by tanks made as relief works. Most of these tanks are allowed to fall into disrepair and are not used because they seem to belong to nobody in particular.

52. Village tanks were not made as relief works, but loans were given to villagers and others under the modified rules for Land Improvement Loans, and in this way several tanks were excavated.

I have no suggestions to make, except that, if village tanks are to be made, they should be given over to petty contractors or piece-workers.

60. Many village tanks can yet be made, but I do not recommend their being made as relief works. The best way is to give loans for excavation of tanks.

61. Several impounding reservoirs have been made in connection with the embanked roads made in the Jamtara Sub-Division.

62. Impounding reservoirs are most useful in undulating country like the Jamtara Sub-Division. They are made at a small cost, and by storing up the water that would otherwise be drained off rapidly, they improve the lands below them, and nearly double the produce. The only drawback is that the raiya's gradually encroach on them and as they get silted up, convert them into rice-fields.

63. Impounding reservoirs could be constructed with great advantage all over the sub-division and particularly in the tract recently affected. It is not difficult to find sites for hundreds of these reservoirs.

67. An irrigation project of this kind is not known to me.

70. Programmes were prepared beforehand, but there were no sanctioned plans and estimates. These were prepared subsequently.

II.

71. (a) A distance of five miles.

(b) A distance of 15 miles.

72. Yes.

73. I would not recommend this. The relief labourers, if cultivators, generally have some business at their homes, which requires their presence at short intervals, and only those who have no lands at all could be removed in the manner contemplated.

74. About half the relief workers resided on the works.

75. Residence was not made a condition of relief. Those who lived far from the work remained on it, others whose homes were within easy reach used to go home.

76. I am in favour of indirectly inducing residence by having only a few works open. I have no evidence that non-residence attracts persons not actually requiring relief. I consider a high task and low wage sufficient tests.

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77. No, it is not so distasteful.
78. No, the establishment would not be sufficient.
79. No reductions in the task have been made on account of distance.
80. No huts.
81. No. The health of the relief workers was good.
82. No.

(President).—Are you the Sub-Divisional Officer of Godda?—Yes.

Where were you during the famine?—I was at Jamtara during the famine.

With reference to your written answer No. 2, did the *bhadoi* crop fail?—The *bhadoi* crops were better than the winter crop. They did not fail to so great an extent; and planting was also affected by the late setting in of the rains.

And the *rabi* of 1897, did that fail too?—Yes. The *rabi* of 1897 failed almost entirely.

Was it much sown?—It was sown.

And the previous *rabi*, the *rabi* of 1896, what sort of a crop was that?—That was a fairly good crop.

In your written answer No. 7 you say that the population have very small resources generally. Are they enough to carry them on to the next harvest? Is this owing to laziness or improvidence?—I think it is owing chiefly to the character of the soil. It is a poor soil and the people are improvident in their habits. Whatever they get they part with very easily to the *mahajans*. Both on account of the character of the soil and the character of the people.

Generally, if they have a good crop most of it goes to the *mahajans*?—The good things go to the *mahajans*, and those that are inferior are kept by the cultivators. The rice chiefly goes to the *mahajans*.

With reference to your answer No. 9, when did you begin to notice that people were looking thin and getting weak?—About the month of February signs of distress were noticed.

Not before that?—Not before that.

When were relief works first started?—Test works were opened in February, and relief works in March.

Did many people go to the test-works?—The test-works at the head-quarters were attended largely, but not those in the interior. No sooner were test-works attended largely, than famine was declared and relief works were opened in several places and well attended.

By Sonthals?—Yes, chiefly by Sonthals.

They brought their women and children with them?—Yes, they brought their women and children with them.

They looked after their children well?—Well, the children were looked after in the beginning, but later on when they exhausted what they had, I noticed that the children looked thinner than the grown-up people. The first signs that I noticed were that their hands and bodies were quite blistered by eating jungle produce. I noticed many children in that state.

I suppose grown-up persons can endure more than a child can?—Yes. They can stand more than a child can.

You say in your written answer No. 10, "In my experience the number of persons on relief in the worst months of the famine did not exceed 5 per cent., but this low percentage is attributed to the character of the Sonthals inhabiting the affected area who can live on jungle produce and herbs of the field, and many of whom obtained employment in the collieries in the vicinity of the affected area." Were the people who live in that way on jungle produce in a bad condition at the end of the scarcity?—They were greatly reduced. I noticed they were looking dropsical.

But they preferred to live on jungle produce rather than go to relief works?—Yes, many of them preferred to do that as long as they could.

Were there kitchens?—There was, one kitchen at the head-quarters at Jamtara itself. It was attended chiefly by children.

Children without their parents?—Yes. Parents used to bring them. They used to live within a mile and parents of course used to get employment. We had a large system of works under the Land Improvement Loans Act near the head-quarters where several tanks were excavated and many children would come.

Was there any poor-house?—No, there was no poor-house.

Did you notice what wages were given by private employers to coolies?—I think they were getting less wages. The demand for labour was less than in other years and the supply was very great.

Generally speaking, do you think coolies' wages altered during the famine?—I think they were a little lower.

Were there many artisans in need of relief?—No, there were very few, principally weavers.

How did the weavers get on?—We had them weaving cloth for people, but most of them were cultivators in addition to their weaving, and some of them attended relief works and others managed by borrowing.

Is the Sonthal weaver a separate class from the Sonthal raiyat?—No, many raiyats weave their own cloth.

Village relief was not given in all villages I suppose?—No.

Given at centres?—Yes.

(Mr. Holderness).—I think you worked through Local Committees?—Yes.

Sending up names of applicants?—Yes. We made enquiries and then we entered them in a register and as they came on the accounts were sent to the grain dealers. But the chief distribution was at the head-quarters.

Head-quarters at the town?—Yes.

Was there great distress in the district?—Yes. There was great distress in half the sub-division, not the whole.

(Dr. Richardson).—Was the mortality very great?—In the famine area it was less than in the other part of the country. It was higher than the ordinary rate.

How came it that it was less in the famine tract than in others?—I do not know exactly.

Was it due purely to hard times?—The excessive mortality was due to hard times and to cholera.

Did they disinfect wells with Permanganate of Potassium?—No, it was only used at the head-quarters. The people generally drink tank water.

(President).—I see you recommended that the piece-work system might be tried by giving contracts to respectable men?—Yes, *i.e.*, like the system of giving loans for making tanks in villages at fixed rates. We tried that and found it very successful. One-third was to be remitted if they did the work satisfactorily.

Was work done under that system?—Yes. We lent about £10,000.

And did it work well?—Yes.

Did landlords employ people who were most in need of relief?—Yes. I believe so. It was not landlords who took these loans, but petty landholders.

They took it to improve their lands?—Yes.

Did that give relief by means of labour to the people who required it?—Yes. I know of people coming from a distance of 10 miles to work upon these village tanks.

You think that is a good way of dealing with the distress in the Sonthal Pergannas?—Yes. I think it is. The difficulty is that these loans are only given to people who can give good security. I recommend that if any work is to be done it ought to be done by the contract system.

(Mr. Holderness).—You say to a landlord "you are to make a tank of such depth and such size and so on. I will give you so much money if it is made, and if you employ a certain class of people"?—Yes.

(President).—You say impounding reservoirs could be made all over the affected tract?—Yes. Because it is an undulating country.

Are there any in that tract?—Very few.

Mr. SAKHAWAT HUSSAIN, Assistant Settlement Officer, Darbhanga, called in and examined.

I put in a written statement of evidence.

The points on which the Indian Famine Commission desire information are :—

- (a) Departures from the prescriptions of the Bengal Famine Code which have occurred in the Province during the recent famine.
- (b) Degree of success which has attended the measures adopted, considered primarily with regard to the relief of distress and the saving of human life and secondarily with regard to economy.
- (c) Advice as to the measures and methods of working which seem likely to prove most effective in those two respects.
- (d) Other recommendations or opinions thought likely to be useful in case of future famines.

As I have no copy of the Bengal Famine Code with me here, I am not in a position to state exactly in what relief measures the prescriptions of the Famine Code were departed from. I can, however, give an account of the measures that were adopted to afford relief, and thus place facts regarding the famine operations before the Commission.

I was employed on famine duty in district Nadia, in July and August 1897. The famine area in the district was divided into several charges, one of which comprised two *Thannas*, *Meherpur* and *Gangni*, sub-division *Meherpur*, and I was posted to this charge as an Assistant Charge Superintendent. I am unable to state from memory, the area and population of this charge, but when I joined the sub-division, I found the number of persons in receipt of gratuitous relief as shown below :—

Name of charge.	Name of circle.	Name of centre.	No. of persons on the list.
Meherpur (District Nadia).	Meherpur	Kalaidanga	1,371
	Ditto	Meherpur	2,587
	Ditto	Pirojpur	1,198
	Ditto	Daryapur	1,434
	Ditto	Rattanpur	1,124
	Gangni	Gangni	2,691
	Ditto	Bhatpara	1,838
	Ditto	Shorabireá	2,359
	Ditto	Bamandi	2,134
	Ditto	Korumdi	1,625
			13,361

The system of gratuitous relief was to issue weekly doles of rice, $3\frac{1}{2}$ seers to each adult, and $1\frac{1}{2}$ seer to each child under twelve years. The rice required for doles was procured through contractors.

I have no personal knowledge of the mode in which the names of the recipients came to be entered in the list, but I learned from enquiry that the police agency was at first employed in administering gratuitous relief, and the list was prepared by it. The sub-divisional officer, Meherpur, supervised all famine operations, and from June 1897 two circle officers were appointed to assist him, and the police were relieved of their famine duties. The number of dole recipients had, by this time, become large, and it was found necessary to substitute daily for the weekly dole system, and the villages comprised in each sub-circle were divided into five blocks and sub-circle officers appointed, one to each centre. As officers became available from Behar, the number of circle officers was increased.

From about the middle of July, efforts were made to have the number of dole recipients reduced and large reductions were effected. It was felt that gratuitous relief in the form in which it was then being given, was demoralizing, and arrangements were accordingly made to exact work, and aute was offered for twisting. Many persons refused this work, and they ceased to receive doles. Some of the recipients who were fairly able bodied, were sent to relief works.

In some cases, whole families consisting of several children were in receipt of doles, and relief was disallowed to some children, the doles to the others being considered sufficient for all the children. In this way, the number in receipt of relief was reduced, between the 17th July and the 3rd August 1897, from over 18,000 to 6,000.

From the first week of August it was considered advisable to open a poor-house at Meherpur and children's kitchens, one at each centre. The attendance was poor everywhere. Some five persons applied for admission to the poor-house, but, after admission, they did not wish to stay. The kitchens were generally not well attended.

The above is a brief account of the gratuitous relief operations as carried on in Meherpur charge, and a reference to the Famine Code will show how far they differed from the prescriptions in the Code.

- (b) Degree of success which has attended the measures adopted considered primarily with regard to the relief of distress and the saving of human life, and secondarily with regard to economy.

I have described the measures adopted in Meherpur so far as the gratuitous relief is concerned. I had nothing to do with relief works or other forms of relief and my evidence must be confined to the work on which I was employed. The measures of gratuitous relief were sufficient for saving human life, and no single case of loss of life came to my knowledge. Nothing but rice was allowed, but as the people were not utterly destitute, they could supply themselves with condiments and other necessaries. As regards economy, I must say there was room for it. The employment of the police agency in administering relief resulted in a large number of persons being brought on the list, many of whom could be left out, at least in the early stages. When persons have once been admitted, it is more difficult to exclude them from relief than to refuse relief in the first instance. The cost of operations was large and it could, I think, be curtailed without risking any loss of life.

- (c) Advice as to the measures and methods of working which seem likely to prove most effective in those two respects.

The famine period may be divided into two stages—

First.—The panic stage.

Second.—The distress and the relief stage.

As soon as the failure of food supply is apprehended, people generally begin to form an exaggerated idea of the coming distress, and some panic is created. At this stage some measures should be adopted to reduce, as far as possible, the alarm of the people and it seems to me that the opening of poor-houses at sub-divisional and head-quarter towns will considerably help to allay this alarm. The admissions to these poor-houses should of course be made after full consideration and proper inquiry, but their very existence will, it is believed, have the effect of inspiring people with the hope that, as a last resort, they can seek relief in them. The ignorant people of Bengal and Behar have not had their feeling of self-respect properly developed, and they experience no feeling of shame in accepting free doles of grain, even when not in actual distress. They will, however, not seek relief in poor-houses unless distress compels a large number of them to do so. During the panic stage, which should be the testing stage, poor-houses should be opened and placed in charge of responsible officers specially selected for the work, and about this time test relief works may also be opened.

When distress becomes general and large numbers of applications are made for admission into the poor-houses or, in other words, when the distress stage has been reached and the attendance at test relief works proves it, children's kitchens should be opened in the interior and relief works on a sufficient scale also started. All able-bodied males, and such of the females as can do earth-work, should be sent to relief works. From among the inmates of the poor-houses the infirm and the aged, who may be unfit for any work, may now be sent away and grain doles allowed to them in their own homes. The poor-houses should now accommodate only such persons as may not be fit for relief works nor utterly unfit for all kinds of work. Dole should be allowed to only such of the infirm and the aged as have been tried in the poor-houses and been found utterly unfit for any kind of work. The inmates of the poor-houses should be required to do some remunerative work. The most difficult problem in famine administration is to find suitable employment for unskilled labour which cannot be utilized in relief work.

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Mr. Sakhat Hussain. In the present famine in Nadia jute twisting was attempted, but I understood the cost of the raw material was more than the manufactured article could sell for. The work to be exacted from the inmates of the poor-houses should be such as would pay, in part, the cost of their relief. All work connected with their up-keep and the building of the poor-houses should be done by them. They can husk their paddy into rice, grind their pulse into dāl, pound their condiments and do cooking and other work. The work of preparing raw food stuff such as husking, grinding, sifting and other similar work, with which most of the inmates must be familiar, will, I think, prove remunerative as the demand for articles of food is a never-ending one. Some of the articles of food required for the army may, if cost of carriage be not prohibitive, be prepared at these poor-houses. In fact, all work connected with the preparation of articles of food can be done, some for consumption and some for sale, and if done under an organized system, the cost of relief may be kept within reasonable bounds.

Assistance to *parda nishins* and other persons of respectable classes, should be given in the form of loans so that their sense of self-respect may not be lowered. The dole system is a very demoralizing system, and only in extreme cases should it be adopted.

(d) *Other recommendations or opinions thought likely to be useful in case of future famines.*

The provisions in the present Famine Code are sufficient for all practical purposes. A great deal, however, of the success of operations must depend on the agency employed, specially in the first stage, and at this stage the best agency available should be utilized. The work of admitting persons to gratuitous relief is a very important one, and ordinarily only Gazetted officers should be placed in charge of poor-houses which should be treated as centres of famine administration. The police agency may, if possible, be avoided in the actual administration of relief, but it should continue to be held responsible for reporting extent of distress and, later on, each individual case deserving of relief. The duty of opening poor-houses may, in the first instance, be imposed on Town Municipalities and District Boards, the services of Government officers being lent to them.

(President)—You are an Assistant Settlement Officer?—At present, yes.

Employed at Darbhanga?—Yes.

Before that what was your post?—Before that I was a Charge Superintendent, for seven weeks, in the Nadia district.

Before that what post did you hold?—I was ten years Manager of an Estate under the Court of Wards.

In which Division?—In the Orissa Division.

You went to Nadia by the end of June?—July 1897.

And you were put in charge of two Thannas?—Yes, two Thannas.

Was gratuitous relief in force when you joined?—Yes. I found 18,000 persons on gratuitous relief, and I cannot say now how many there were on relief works. I considered

the number on gratuitous relief to be excessive and took steps to reduce them, the people not being in great distress, and I reduced the numbers to 8,000. Cooked food was offered to children, and poor-houses opened for adults, and those who did not accept that form of relief were struck off the lists.

Were the people very distressed?—No. About that time they had a coarse kind of locally called *dhuro* crop, and they could go on eating that.

(Mr. Bourdillon).—The population is Mahomedan?—Mostly Mahomedan.

(Mr. Holderness).—What were the abuses you refer to in connection with the employment of the police as relief agents?—I do not approve of the police as relief agents, they and the chowkidars got many put on the gratuitous list who were not in actual distress.

Then your circle agency was not sufficiently strong?—A proper circle agency was created later on.

If that had been created before?—Then the abuses would not have been so great.

In future famines your proposal is to open poor-houses at an early stage?—Yes.

Why do you recommend poor-houses at the first stage of the famine?—Because poor-houses will prove a good test if supervised by Gazetted officers who will see that the proper objects of charity are being selected with care and consideration, and therefore those who are not in actual distress will be eliminated.

Do you think they operate as a test?—Yes. The people will not go to poor-houses unless a large number of them are in actual want.

You say here that the ignorant people of Bengal and Behar experience no feeling of shame in accepting free doles of grain, even when they are not in actual distress?—I found it by experience in Nadia and Behar.

Had you any famine work to do in Behar?—I had no famine work in Behar. You would not find poor houses well attended unless a large portion of the people are compelled to go to them.

Are you in favour of giving doles of grain?—No, excepting to those who are utterly unable to work. But I would give them after they have been tried in the poor-house. I would not give anybody a dole except those who pass through a poor-house and are incapable of work.

As to kitchens what would you do?—As soon as the attendance in the poor houses and on the test works prove that famine exists, then kitchens should be opened.

Did you find it difficult to get work out of your gratuitous relief people?—Yes.

Was it difficult to find any class of work to give them?—Yes. It was. In fact they refused jute twisting which is very light work.

(President).—Where is your home?—Bhagulpur.

Do you think that people of good caste, even if they are in great distress, would go to a poor-house? Loans should be given to people of good caste.

(Mr. Bourdillon).—Then a poor-house would be a test only for low class people?—Yes, only for low class people.

RAJ BAHADUR RAJ MOHAN BANERJI, Civil Medical Officer, Palaman, called in and examined.

I put in a written statement of evidence.

Bahadur Raj Mohan Banerji. Test-works were opened in this district, but not according to the Famine Code (task-work system). It was on the modified basis of the piece-work system, restricting the maximum work to 100 cubic feet as the daily earning of the labourer. Though it did not draw many labourers, yet the high abnormal prices of food-grains prevailing in this district led the authorities to open relief works after a short interval. This step was very judicious and prudent, as it prevented many from untimely death.

2. I venture to suggest that the provisions of section 11 of the Bengal Famine Code may be modified, so as to render it more elastic, as the hard-and-fast rules of the task-work system do not at all times, especially at the outset of famine, suit the varying circumstances of the people and deter them to flock to the works, through causes of limited earnings, hard task and strict discipline, etc., and to conclude from the mere absence of something like a rush of labourers to the test-works that there is no distress or danger, may in some instances be erroneous.

3. Relief works in this district were conducted from the beginning on the modified piece-work system. Test-works with their complicated system of maximum, minimum and penal wages, were never enforced. Under the modified system of piece-work (Blackwood's system), no single individual was allowed to do more than 100 cubic feet of earth-work, and consequently earn more than 3½ annas per day. This restriction was subsequently withdrawn, with the result that the average outturn of earth-work per male unit increased from 51 cubic feet to 68 cubic feet per day, and the consequent earning increased from one anna nine pies to two annas two pies per day. This had no effect in increasing the number of workers. This tends to show that those in actual need had been on the works from before, and the withdrawal of the restriction did not invite those that were not in actual distress. The rate of payment was, I believe, low enough to secure the much desired effect of shutting out those not in actual distress. Judging from the low number of dependants of the relief workers on gratuitous relief, it is to be presumed that the earnings of

the workers, partially at least, went to relieve their families, who were in their turn free for collecting edible jungle products with which this district abounds, and which came not a little to the relief of the sufferers.

4. So the advantages of the piece-work system, mentioned in paragraph 11 of Bengal Government Resolution No. 181 T. R.—Fam., dated 6th May 1897, were fully observed. Moreover, this is a simple system understood by the people, and enables them to join and leave the works just as suits their convenience, in attending to their own private works as agriculture, etc.; whereas the disadvantages were not noticeable, though the system gives some advantages to the professional workers over the others, the former earning more than the latter. It should be remembered that the professionals have to earn their livelihood solely from the work done, whereas the cultivators have other means of supporting themselves; they have then credit, and generally some little stock to enable them to tide over through the temporary distress.

5. As the task-work system was never introduced here, its advantages or disadvantages were not put to any practical tests. But, having regard to the nature of the works opened in this district, I think the task-work system would have been quite unsuitable. These works consisted chiefly of excavating tanks, putting existing reservoirs in proper order, raising embankments and road-making, scattered all over the district. In such cases enforcement of the task-work system would have entailed a large establishment, quite out of all proportion to the amount of relief given. These works were of permanent utility to the district, and helped towards securing agricultural prospects. They were in the vicinity of the villages of the workers, and though the distance test was inoperative, yet it tended to reduce the number of dependants on gratuitous relief. No large works under the Public Works Department were undertaken. The works were all under the supervision of the Civil Officers, and as the number was low, it prevented a large assemblage of persons in one centre, which might have resulted in the outbreak of epidemic diseases.

6. This small work system has all the advantages over large works, excepting increased expenditure for supervision. Large works must of necessity be the back-bone when the famine is acute and wide-spread, and when a large number of people have to be provided for.

7. Test-works, however they may be suitable in large works, are quite out of place in small works. As laid down in paragraph 14, clause 7 of Bengal Government Resolution No. 181 T. R.—Fam., dated 6th May 1897, no piece-work is to be opened within a distance of five miles of any large work conducted on the task-work system.

8. Gratuitous relief was conducted here by committees appointed by the Deputy Commissioner at the head-quarters of each Police station and out-post, consisting of local zamindars and other respectable men; members were instructed to make house-to-house visitations and enquiries of fit subjects for gratuitous relief, which was rendered at their homes.

9. This was a departure from the Famine Code, which imposes this work on the Circle officers. This system worked here with great success, and caused not a little saving to Government in the way of establishments, etc. The work was done by honourable members who could be relied on in every respect better than poorly paid officers. Where possible, this plan may be introduced. The objects of relief were selected according to the instructions of the Code.

10. Gratuitous relief by cooked food in kitchens was not given. It was given in money doles, and in some cases in grain doles; the latter should always be preferred.

11. Artizans and other respectable people were not relieved by Government, but by the Indian Famine Charitable Relief Fund, by cotton spinning, cloth-weaving and chatoo-grinding, etc. This sort of relief was not only not welcome to the indigent respectable people, but it was their main-stay. The relief of such people who consider themselves too respectable to attend relief works and who are the most sufferers in times of distress, and their relief is of paramount importance, and it was conducted with signal success by the Indian Famine Charitable Relief Fund with which as Secretary, I am thoroughly conversant.

12. Relief from the Indian Famine Charitable Relief Fund was given in the following manner:—

(a) Money doles to the respectable *paria nashins* and incapables, who were too proud to work for a livelihood without wounding their susceptibi-

lities, and would rather die and patiently endure all hardships than accept Government gratuitous relief. From these, no return in any shape was obtained.

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(b) By cotton work. The people relieved were middle class respectable females who were paid at the rate of about five annas per seer of cotton spun. The thread so obtained was given to the weavers who were paid about half-anna for every yard of cloth woven, which is the ordinary market rate here.

(c) By chatoo-grinding, which relieved a considerable number of indigent people who preferred this to cotton spinning. This work was carried on with little loss to the fund.

13. The organization to carry out this extensive ramified system was quite independent of officers paid from this fund. I availed of the services of the Inspecting Educational staff, with the permission of the Deputy Commissioner, to supervise the work, and who conducted it through their Gurus, who are always available in every district, and who can always be conveniently reached by all in need of help. Their local knowledge of adjacent villages helped them in finding out and relieving the distressed. This they can do without interfering with their legitimate duties. Here they did not get any remuneration.

14. Relief of these persons, as contemplated in Chapter X of the Famine Code, is a very meagre one. A cut-and-dried plan should be introduced in the Code, as these persons form a considerable bulk of the population, and who are the most sufferers in times of distress. The plan followed here was attended with signal success, and recommends itself to me as the most feasible, least expensive and most successful.

15. In conclusion, I beg to add that the minimum ration prescribed in the Famine Code, and that proposed by Mr. Higham, appears to me to be rather too low. In order to keep one in a good working condition, a more liberal scale of diet is necessary: the poorer the physique, the better the scale of diet should be; and in this connection I would suggest the abolition of the penal wage altogether.

(President).—You are a Brahmin?—Yes.

You are the Civil Medical Officer of Palamu?—Yes.

How long have you been there?—I have been there nearly four years.

Have you been in medical employment in other districts in the Chota Nagpore Division?—No.

(Mr. Bourdillon).—You were chiefly concerned with the Charitable Fund?—Yes.

(Dr. Richardson).—Was the mortality very great?—Yes, very great.

Have you got the statistics?—I have got the statistics. The mortality of 1896 and 1897 was very high and is much the same in both years.

Do you attribute this mortality to the hard times?—No, we tided over the hard times very nicely. Our mortality in 1896 and 1897 was much the same.

You seem to attribute the cause of the high mortality to privation?—Yes, partly to privation, but chiefly to epidemic diseases.

What were those?—There was small-pox, and cholera from May to October or November.

What proportion of deaths do you estimate was due to cholera?—The proportion of deaths due to cholera was 6·61.

And small pox?—42.

Then deducting the mortality from cholera you bring the total mortality in the year to 33,000, which is not above the normal mortality?—That is the normal mortality.

Then you do not attribute much of the mortality to privation?—In the small compass I know, the death-rate of the jail, the mortality was rather heavy this year and that I attribute mostly to the privations which the people had suffered from.

Then you do not seem to make out that the mortality of the district generally was much affected by the scarcity?—As I have been telling you, we tided over the distress very nicely from the beginning of the year till the middle of August. Then there was heavy mortality from cholera and other diseases, and this was owing to the

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miserable condition of the people from privation and scarcity.

You would not attribute it to the heavy fall of the rains?—Yes, the setting in of the rains had much to do with it.

Then it was not due directly to scarcity?—It was not directly due to scarcity.

(Mr. Holderness).—You advocate, I see, the abolition of the penal wage and at the same time you think the minimum ration prescribed in the Code and that proposed by Mr. Higham too low. If you abolish the penal wage, would not that increase the chance of the workers getting too little?—It is the labourer's look out.

If you abolish the penal wage, is not that against the labourer?—Yes, that is against the labourer. I base my recommendations on what I have seen in Palamau. The minimum scale of diet should be raised, as that prescribed by the Code is rather too low.

Revd. Mr. A. Campbell.
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Revd. Mr. A. CAMPBELL, Sonthal Mission, Free Church of Scotland, Pokhuria, called in and examined.

I put in a written statement of evidence.

Instead of the system of task-work prescribed by the Bengal Famine Code a system of piece-work was substituted.

Relief workers were organized in gangs, each gang under a sardar chosen by themselves. Each gang was sub-divided into squads which were, as a rule, composed of the members of one family. Gangs consisted of from 40 to 150 relief workers. A gang was composed mainly of the inhabitants of one village, and the size of the gang varied with the size of the village.

As the gang became divided into a large number of squads, the head of each squad, who was generally the father of the family, regulated the number of carriers according to the amount he himself, or he and his sons, could dig. The self-interest of the relief workers organized the gang into a larger or smaller number of efficient units—the squads.

Measurements were made daily, and payments made to the head of the gang, who again divided the amount among the heads of squads according to the amount of work they had done. There was no difficulty in dividing the money, as only pits of 10' x 10' x 1', were measured, and heads of squads were all provided with their own measuring rods, and could easily calculate the sum to which they were entitled. Complaints against the headmen of gangs were very rare.

There was no classification of relief workers. The same rate was paid to all.

No payment was made for Sundays, nor when work was stopped through the inclemency of the weather.

Tools were not supplied to all relief workers, and many had to hire them before they could come on the relief works. To some extent this was a hardship, as many were obliged to work with very inferior tools.

Rates were fixed from head-quarters, but for one work for a time; they were, to a certain extent, fixed according to a table issued by the Government of Bengal.

The rates were such as to preclude any able-bodied worker earning more than he required for subsistence. Less able workers had to supplement their earnings by wild fruits, roots and leaves.

After the first month dependants of relief workers received no allowances. Old people who were dependent on relief workers, were put on the gratuitous relief list.

No test was asked of any one who applied for work. The fact that he was prepared to take work at the rates offered was considered sufficient. The Bengal Famine Code does not prescribe any test after it has been proved that famine exists.

Those employed on the works in my charge were encouraged to return to their homes at night, as the water-supply was very deficient. Each party had to bring its own supply of water for the day. In my charge the scarcity of water made it impossible to insist on residence on the relief works, even if it had been desirable. Relief workers came from a radius of 6 or 7 miles to the works. Nothing was allowed for distance.

In my opinion residence on relief works is only possible for raiyats who have lost their all, and for day and agri-

Do you think that the piece-work system is a good one?—I think so from what I saw.

In that case you would not have any minimum wage at all?—No.

Do you think deaths were fully reported in the district?—They were to a great extent correctly reported.

(Dr. Richardson).—Did you use Permanganate of Potassium?—Yes, I used it particularly in the jail. There were two distinct epidemics of cholera in the jail. In the second outbreak, which was in the middle of September, I used various disinfectants, such as Permanganate of Potassium, etc., but the cholera went on in its course very virulently.

They did not produce the desired effect?—No.

(President).—What was the highest price of rice?—It was generally dear at Palamau.

cultural labourers. One object which ought to be kept in view in famine relief is to make it possible for a raiyat to retain his plough cattle and implements of husbandry, so that when rain comes he may be in a position to undertake his cultivation. Residence on a relief work would mean that he might lose his cattle and implements, and be unable to cultivate his land. Cattle seldom die in forest tracts during a famine, and my experience having been gained in such a tract, my opinion will be of no value as regards districts where other conditions prevail.

The majority of the relief workers under my charge belonged to aboriginal tribes, Sonthals, Koles, Kodas, Maliks, Bhuiyas, etc. They stuck to their work all through the nine months that relief works were open and gave no trouble whatever.

To meet the case of some who could not do piece-work, cotton spinning on a considerable scale was carried on. This was not in connection with gratuitous relief, but was a separate department under Chapter X of the Bengal Famine Code. The thread thus produced was made over to weavers as provided for in section 143, Bengal Famine Code.

For some months a system of daily labour was in force. This enabled the officer in charge of gratuitous relief to offer work to all those who applied for gratuitous relief, who, in his opinion, were able to do some work. The pay offered was low; 5 pice to a man, 4 pice to a woman, and 3 and 2 pice to children according to age. Rice, the only grain which was available, sold at from 6½ to 7½ seers per rupee. This daily labour was usefully employed in turfing, and in consolidating earth-work on roads and embankments.

In the District of Chota Nagpur there is much jungle and forest, which, even in ordinary years, supply a certain amount of food to the inhabitants. The principal of these forest products are *makua*, the flower of *Bassia latifolia* and the fruit of *Shorea robusta*, the *sal* tree. The fruit of *Bassia latifolia* is also eaten, but it is only available for a short time, and cannot be stored. Besides these there are a large number of minor jungle products which the people use as food. It will thus be seen that the people of these tracts were not in the same position as those in other parts where there is no jungle. Although the crops failed, the drought did not affect the jungle products in the same degree, and there was still something left for the people.

Under these circumstances it was not necessary to put in force all the provisions of Chapter VI, Bengal Famine Code, regarding Famine Relief Works.

Piece-work met the wants of the people better than *task-work* would have done. *Task-work*, as I understand it, requires a person to be on the work all day. He cannot absent himself for a part of a day, as a member of a piece-work squad can. Under the *task-work* system the Government undertakes the entire support of the relief worker, while under the *piece-work* system, as worked in Chota Nagpur, the relief worker is enabled, and more or less compelled, to resort to jungle products, thus relieving Government of so much expense.

Life cannot be maintained on jungle products alone, even if sufficient were available; grain is a necessity and this the relief worker was able to obtain on the relief works.

Test-works.—Section 11 of the Famine Code, which deals with test-works, has been superseded by Circular No. 3F.—771, dated Calcutta, the 24th December 1896. This circular, unlike the section dealing with test-works in the Famine Code, is extremely vague. It throws upon the officer in charge of a *test-work* a responsibility that he ought not to be called upon to bear. The circular does not describe "a pittance." In the Famine Code the maximum and minimum wage that can be earned is distinctly laid down, and I would suggest that the maximum "pittance" for which a starving man may be expected to accept work should be also stated.

Along with the circular mentioned above, a Resolution by His Honour the Lieutenant-Governor of the North-Western Provinces was circulated. This Resolution deals with the organisation of famine relief-works, and was evidently intended to be a guide to those in charge of such works in Bengal.

Chapter I of this Resolution refers to establishment. It provides that *work agents*, or men whose business it is to lay out and measure work, should be appointed by the Superintending Engineer, but that minor officials, such as mohurrirs, etc., should be appointed by the officer in charge of the work. I would take the liberty to suggest that it should be made imperative that *work agents* or measurers should be on the ground when any *test-work* is opened. It may be thought that their services may not be urgently required, as only a few people may be attracted to the work; but in the event of a rush, such as that which took place at Pokhuria when relief works were started first, the breakdown of the system of test applied is certain to occur. During the first fortnight of these works, no measurers were available, and it was impossible under the circumstances to exact a proper task. The works were said, at the end of the first fortnight, to have been a total failure, so far as applying a test was concerned, but it was solely owing to there being no *work agents* or measurers on the works during all that time.

Task-work versus *piece-work*.—*Piece-work* is without doubt more suitable to this district than what is described as *task-work* in the Famine Code. The gangs, as at first formed at Pokhuria, contained a preponderating number of women and children, so that the diggers were unable to keep them sufficiently employed carrying away the earth. Under the *piece-work* system, as it developed here, this righted itself. As the gang became divided into a large number of squads, the head of each squad, generally the father of the family, regulated the number of carriers according to the amount he himself or he and his sons could dig. The self-interest of the relief workers organised the gang into a larger or smaller number of efficient units—the *squads*.

This had the effect, however, of turning adrift numbers of women who had no male relative to dig for them, or whose fellow villagers could find no place for them in their squads. These women and their families often suffered severely, as their being able-bodied, although unable to find work, precluded their being put on the gratuitous relief lists.

Another defect, which made itself apparent in the *piece-work* system, was that no place was found in it for a man willing to work, but who had not strength sufficient to enable him to earn enough to keep life in. I came across many such cases. After a week or so they had to give in, and some of them eventually came on the gratuitous relief list.

In after famines I would suggest that some system should be introduced whereby women in the position of those I have just mentioned and men willing to work, but below par, may be included in relief operations.

Cotton-spinning.—To a certain extent cotton-spinning meets the case of some of these women, and was largely taken advantage of. But I found that cotton-spinning as a home industry is waning, and that only a small proportion of the women and girls of the cultivating classes know how to spin. Besides, a number who could spin had not the necessary spinning wheel. I did a little in the way of helping the more needy to get spinning wheels, but it was impossible to help all.

Another point to which I would take the liberty of directing attention is that relief workers, who became incapacitated through illness, had no consideration shown to them. Many such cases must have occurred. On the works under my charge they were numerous; but as I had to do with giving gratuitous relief, with the sanction of the Deputy Commissioner, I put such, during their illness, on gratuitous relief. But on other works in the sub-division this could not be done, and considerable suffering must have resulted therefrom.

In these notes I am mainly directing attention to portions of the Famine Code which are not sufficiently explicit, and from not understanding which I have myself blundered. For instance, I understood section 41, Chapter V of the Famine Code, where it says that "it (gratuitous relief) should never be given to able-bodied men nor to able-bodied women who can find work" to mean that able-bodied persons who could not find work might be given gratuitous relief until work could be offered them. This, however, I was informed, was not the interpretation to be put on the words.

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(*President*).—How long have you been in the Manbhum District?—I have been there since 1879, 18 years; and previous to that I was for seven years in the neighbouring district of Hazaribagh.

Is there much difference in those two districts?—Yes; there is a difference.

Was Manbhum more affected than Hazaribagh?—The part I was in was more affected than Hazaribagh. It was the most affected portion of Manbhum.

You had charge of a circle?—I had charge not only of a circle but also of a large relief work for nearly the whole time of the famine.

What was the nature of the relief work?—We had two tanks and three roads.

Had you any kitchens?—We had a kitchen, gratuitous relief, and also cotton-spinning and cloth-weaving on a large scale.

Was the gratuitous relief given at a centre?—Yes, they all came to my house as a centre.

How were the people selected for gratuitous relief?—We selected them according to the rules of the Bengal Famine Code.

I see at certain times the proportion of gratuitous relief was very large. Why was that?—The people were in very great distress before the *mahua* came in. In May last, in one day nearly 200 were selected by me for relief. When the *mahua* came in these people were struck off the list. Then when the *mahua* crop had been gathered and finished, there was another falling off in the condition of the people and they had to be taken on to the list again.

Did these people fall so low in condition as to become fit recipients of gratuitous relief. Do you think their decline was through eating jungle fruits?—When these jungle fruits came in the people improved, and when the jungle fruits failed they had very little to eat, and so fell off. A number of them belonged to the Bauri caste and some of them belonged to the Mahili caste. These people would not work. They became very emaciated and we had to give them gratuitous relief.

(*Dr. Richardson*).—Are they a very low class, these Bauris?—They are aborigines. They are employed largely in the coal mines. Some of them are cultivators and palky-bearers.

(*Mr. Holderness*).—A great many of the people on relief works were aborigines?—The majority were aborigines.

Are they accustomed to that kind of work?—They are to some extent, but most of those I had to deal with were Sonthals.

Did they come willingly on to the works?—When they were in need of relief they simply came on to the works in a rush. In five days we had about 2,800 on the relief-works. I suppose there were another 1,000 or 1,500 but we could not receive them.

Some of these were aborigines?—Most of them were aborigines.

You had no trouble with them?—No trouble. They quickly settled down.

We heard that aborigines were very difficult to manage?—We had no difficulty with them because I have known them for many years. They were not timid or diffident with me.

Among the aborigines is it particularly difficult to give them any relief on account of their being scattered?—So far as my experience goes they are not difficult to deal with. They come sometimes to work from seven miles. The difficulty with the aborigines is that they cling to their homes. I managed 3,000 of them for sometime myself. I did not find as a rule that they held off till too

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weak to be saved. I had two men as measurers and two men as mohurrirs.

These were on Government works?—Yes.

Did any of them reside on the works?—We encouraged them to go home because of the scarcity of water.

Would the aborigines be willing to stay away from their homes?—I should scarcely think so. If a man leaves his home everything he has is carried away, so they stick to their homes to the very last.

Did you employ any special means to find out those people who were in need of relief?—I gave orders to the chowkidars that they were to report all those cases to me. Then when they were reported I had enquiries made.

What is the area of your circle approximately?—I fancy it is probably 16 miles long or a little more, probably by 6 or 8 broad.

Was the whole of the district similarly blocked out?—It was similarly blocked out.

Is it a jungly hilly place?—Yes, it is a jungly hilly place with a scattered population.

Do you think there were many deaths from actual starvation?—It is difficult to say. There were certainly a large number of deaths from privation, but I could not say how many were the result of actual starvation.

Were many people picked up dying or dead on the roads?—Well, not many. A considerable number of people died in my poor-house. The cause of their death was mostly dysentery, the dysentery being induced by destitution. For instance I was told one morning that three persons were lying under a tree. We found them to be a man, his wife and a child who were suffering from dysentery, and all three died.

Was the death of these three people due to starvation? How do you know them?—I knew them before. They were suffering from dysentery induced by privation and they were very weak. They lived in the poor-house for two days and then there they broke down utterly.

Then the evidence points to destitution?—Yes, the indirect cause was destitution, the direct cause dysentery.

Were there any similar cases?—Yes.

Were your poor-house people belonging to your circle?—Yes, they belonged to my circle. There was not much wandering from a distance.

You had only one poor-house?—I had one in my charge and in connection with it I had a kitchen for children. The mortality among children was high.

Do you think the parents showed any indifference to their children?—Yes. There were cases in which parents neglected their children and that is why we started kitchens.

But outside in the district?—Yes, the parents were careless.

Was one kitchen enough for the whole circle?—Yes, for my circle it was quite enough.

When they came to the kitchen did they live about near the kitchen leaving their homes?—Yes. I had at one time 400 or 500 living on the premises.

Are they still coming?—Yes, they are coming. The other day two children came in; they were suffering from dysentery and only two or three days ago one of their relatives came and took them away.

Were your relief works sufficient?—On the whole, I do not think as much relief was given as was required. There was a great defect in the piece-work. There was no proper classification of relief workers and the rate was too low. It was just enough for an able-bodied man accustomed to labour to earn a living and not enough for a weak person.

What was the rate?—We paid two annas on road works. Two annas for 100 feet. At that time they worked as hard as they could, and a man could not earn more than about four pice a day.

Do you think the rate ought to have been raised?—Yes. I wrote a strong letter to the Deputy Commissioner on the subject. The rates were very low.

What is the usual district rate?—About three annas.

What was the reply?—He gave me no reply.

A man did not earn enough to keep himself?—Only a strong man could.

Not enough to support his children and family?—No. The people in our district can get on fairly well if they get a little grain. On the works the rates were not fixed in accordance with the tables given by the Bengal Government. The Bengal Government's table deals with three kinds of soil, soft, middling and hard. Our soil was rock and we only got the hard soil rate. And no concessions were given to weak labourers. This was very hard on women and weak people whose males had gone off to Bengal and other places for work. I found that a number of men had left their women and children behind. Some of them had gone to tea plantations. They left their families behind them. These women were thrown adrift and it was to help them that we started cotton-spinning and afterwards a system of daily labour.

Daily labour without any task?—Without a task.

(President).—Not piece-work?—No.

(Mr. Holderness).—Do you think that works were opened early enough?—Yes, quite soon enough. I knew of the distress about the middle of the month when I drew the attention of the sub-divisional officer to it. There was no delay in opening the first work, but there was delay in opening others. It was not till April that a sufficient number of works had been opened.

You are speaking of your own circle?—I am speaking of my own circle and the parts near it with which I am well acquainted.

Was the only defect in the piece-work system the lowness of the piece-rate?—The great defect of course was that we had no classification. Men whom I knew came on to the works and tried, but failed to earn sufficient to keep them alive. These men were driven away. I would have liked to have better rates for the weaker squads.

At the Additional Commissioner's Office, Bankipur.

NINTH DAY.

Wednesday, the 2nd February 1898.

PRESENT :

SIR J. B. LYALL, G.C.I.E., K.C.S.I. (PRESIDENT).

SURGEON-COLONEL J. RICHARDSON.

MR. T. W. HOLDERNES, C.S.I.

„ T. HIGHAM, C.I.E.

RAI BAHADUR B. K. BOSE, C.I.E.

MR. J. A. BOURDILLON, C.S.I. (Temporary Member for Bengal).

MR. H. J. McINTOSH, Secretary.

*Revd. Mr.
H. Jackson.*

*2nd Feb.
1898.*

Reverend Mr. H. JACKSON, Missionary, Mozufferpore, called in and examined.

Can you say Mr. Jackson on this map where your head-quarters are?—Mozufferpore. But my mission district covers nearly the whole district.

What opportunities have you particularly had of seeing the famine relief operations?—All I saw and was directly concerned with, was in Mozufferpore. But I have

been all over the district; I saw the alms-house there; then I have been up to Bettiah and Motihari, but outside the town I saw relief operations only on the way coming and going. My mission district covers the whole of the district.

In Mozufferpore itself were you in charge of any mahallas?—I was in charge of one of the mahallas or thannas from March to October.

In the town was there much distress?—Among the poorer classes a great deal; and it would have been a great deal more had it not been for the timely relief given to them.

They were suffering from the high prices?—That is what it was.

In what month did you begin to notice that the effect on their appearance was marked?—When rice went from 19 seers to 14; *i.e.*, in the beginning of January.

By January did you observe any difference in the appearance of the poorer people?—No, I do not think so; I noticed nothing very marked at that time.

In what way was relief given in the town?—First in rice and then in grain, and then we gave money doles.

How were the lists made out?—By the members of the Committee. The Committee appointed a number of volunteers and with the aid of the principal people living in each mahalla the names were taken down and checked by a volunteer. I was asked to look after a mahalla, and as far as I could I selected names for the list.

Were the conditions of the Famine Code strictly followed?—They were followed just as closely as was possible.

Was this gratuitous relief by Government funds or was it charitable relief?—We administered both. We administered grain and money doles from week to week out of the Government money. The *parda nashins* were not provided for in the Code; they were provided for from the Mansion House Fund. We gave orphans R2 each, *parda nashins* R2-8 each, and children R1 each.

Who were these people? What caste did they belong to?—A great many of them were Mahomedans and the majority of the Hindus were *Domes* and *Chamars*. This was in the town, but in the country they were cultivators. A large number of the women were widows. I found this out from enquiries. They had nobody to provide for them.

Were the people willing to come on famine relief, or did only those people come who were driven to it by necessity?—As far as I saw they were those who were driven by necessity. I am quite sure that those who were able to get work would not ask for charity.

What did you see of the poor-houses?—I was there three or four times. I think they were very well taken care of.

To what class did the people in the poor-houses belong?—I could not tell. They looked to be very low class, both men and women. People objected to the poor-house. They would not go to it unless they were compelled. A number of persons who were in the streets would not go to the poor-house. I am sure they were very well treated in the poor-house.

When did gratuitous relief in Mozufferpore come to an end?—In August or September.

How have the people who were relieved got on since then?—I had some maize from America, and also some mission funds, and I provided for 500 people every week. They are all gone now. I do not see anything more of them.

Do you think they are living now on charity?—A number of them are able to get work.

What sort of work?—The women carry water and do a little work about the house and get half their meals and a few pice.

Had you to relieve a large number of artizans?—We had a number of men who were making thread and rope, but I do not think it paid.

It did not pay the cost of the material?—No, the thread and rope were imperfect, and it would not sell. There was also some tank work done, but I had nothing to do with it.

Were there many orphans on the list?—There were very few indeed. I had 10.

From outside?—From outside. We got them very young; it was impossible to keep them. I had two or three more, but they died.

Did they belong to the district?—Yes.

I suppose grain was always to be bought?—Yes; it was always to be had at market rates.

Do you think stocks were very low?—I have no idea. For a time Indian corn was very scarce: people had small stocks of it. I sold a quantity of American corn when the *mahajans* sent for it.

That is maize?—I suppose American maize.

What quantity of it did you get at Mozufferpore?—I got 2 carriage loads: fourteen tons, I think, altogether.

Had they any prejudice against American maize?—No, they were only too glad to get it. They never refused grain. We were told they took it just as willingly as any other. What I was surprised at was to see they took beans and they enjoyed them immensely.

What beans were those?—American beans.

They liked American rye too?—Yes.

You have no suggestions to make with regard to what you have seen in the famine?—I have a theory, but I think it is probably not correct. I think steps should be taken to prevent the grain from going out of the district. Such quantities of rice were exported that even the *zemin-dars* had to import Burma rice for themselves and the people. I think that there is no doubt that a great deal of distress was prevented by the timely provision that was made. Everything was well in hand before the people were affected by the scarcity.

Were you in this country in 1873 and 1874?—No.

(*Mr. Holderness*).—Were there many weavers in Mozufferpore?—No.

Did the artizans seem to suffer?—I do not think they did. They did not come for relief. There were very few in Mozufferpore. It was mainly a famine for the coolies and the *parda nashin* class.

You administered both classes of relief, I believe, from the Mansion House Fund and from the Government?—Yes, both.

Was the *parda nashin* class more numerous than the coolies?—No. They were much less numerous.

Had you any difficulty in ascertaining about *parda nashins*?—I made the fullest possible enquiries. I went to their houses. I saw the condition of their houses and made enquiries from outside. I also enquired of one of the wealthy men in Berhampore if he knew of these cases; but of course it was difficult to get at real facts.

Did any case of fraud come to your notice? Persons getting relief who were not entitled to it?—I do not think so.

In ordinary years is there much pauperism in the district?—I think not in Mozufferpore. Since I have ceased giving relief I have not had more than half a dozen paupers applying to me for aid.

Had you any kitchen relief where cooked food was given?—No.

You did not see anything of it?—It was in Mozufferpore, but I did not see it.

Do you think that form of relief could be given instead of money doles and grain doles?—No, I do not think it could. I advocate giving them money. They could buy rice and *mussala*. If they took cooked food they were out of caste.

Would it be an unfair test and too hard a test?—Yes, I think so.

(*Mr. Bourdillon*).—Mr. Chapman, Collector of Saran, says that it is not so much a test of distress as a test of self-respect?—Yes, I think so.

You do not think the relief given to the people has demoralised them?—They are very grateful. I have never seen so much gratitude in natives as in the reception of famine relief. In fact they looked upon it as a personal favour. It seemed to be a personal gratitude which they expressed very freely.

How many people had you in your list?—I had 200 or 300.

You sold the grain which came from America?—Yes, I sold a part of it in order to buy rice.

I suppose the maize was in a ground condition?—Yes.

Revd. Mr. H. Jackson. I hear American maize would not keep very long. Could you tell us if this is so?—I do not know.

2nd Feb. 1895. Do you think the American maize would do as food for the people if we had to import it?—Yes, I think it would.

(Dr. Richardson).—Did you come across any deaths from starvation?—No, I do not remember. I spoke of the children; they came to me in such a condition that they died. I lost several children.

Were they left by their parents or were they picked up?—They were picked up.

(Mr. Bose).—You said the people were very grateful for gratuitous relief. What was the feeling about relief works?—I did not hear anything, but I should judge they would be. I saw them working on different roads and tanks.

(Mr. Holderness).—You think that relief works had a good political effect?—I think they had.

MR. J. LANE LONG, Inspector of Works, Belhar Division, called in and examined.

Mr J. Lane Long. I put in a written statement of evidence and written answers to the Commission's questions.

2nd Feb. 1895. DEPARTURES FROM THE PRESCRIPTIONS OF THE BENGAL FAMINE CODE WHICH HAVE OCCURRED IN THE DARBHANGA DISTRICT DURING THE RECENT FAMINE.

As Executive Engineer in charge of the Darbhanga Famine Relief Division my general personal knowledge of the administration of the famine is officially limited. Anything I may state herein is therefore the outcome of my personal experience only.

Bengal Famine Code, Part I, Chapter I, Section 5, Form 3, makes provision for the preparation of programmes of relief works.

To the best of my knowledge when the famine commenced no workable Programme of Famine Relief existed.

Section 20, Bengal Famine Code.—The difficulty of defining matters of a "purely technical character" prevented the provisions of this section being properly carried out. While on the one hand the Collector of the district was responsible to the Commissioner for the proper and efficient conduct of a famine relief work, the Executive Engineer in charge of the work was directly responsible, not to the Collector, but to the Superintendent and the Chief Engineer.

Paragraph 22, Bengal Famine Code, makes all officers on famine, subordinate to the Collector for the time being. This, I think, is as it should be unless the Public Works Department are to act entirely independently of the Collector, taking all responsibilities after the Collector has made over the land for the works to be done. During the late famine the Public Works Department was inserted in the form of a wedge, not as individuals but as a department, not to assist but to supplement the staff at the disposal of the Collector.

I think it would have been better if the Public Works officers had been placed entirely at the disposal of the Collector to assist him in every possible way. The work usually done during famine is not work which requires the superintendence of high professional rank and attainments, and young energetic officers of the Public Works Department might be considered to have sufficient experience to carry out works on the lines laid down in such a circular as that prepared by Mr. Palmer, Executive Engineer (and circulated in this province as enclosure to Bengal Government No. 420 M. P. I.), without any high professional supervision.

Paragraph 62, Bengal Famine Code.—It was not found possible to divide the labour into so many classes; this is partly due to the facts that relief works were opened with a rush; that the task on relief works was at first not strictly imposed or not properly fixed; that the maximum task fixed by Government was too small in many cases. The classes therefore, as they appeared on relief works, were practically two only (A.B.C.) and (D.).

I can think of no simple method of making the classification fuller.

Paragraph 65, Bengal Famine Code.—The methods suggested are crude and not practical. The large number of tasks which have to be measured up each day by the officers in charge make it quite impossible to take actual measurements of each.

Paragraph 67 (2).—It is not possible to fine in proportion to work left undone; the difficulty of measuring completed tasks is more than any staff can do, unless methods are adopted to simplify the measurements; and no simplification is possible in the case of a pit or task incompletely or irregularly executed.

On a work giving employment to, say, 3,000 people, there would be at least 300 to 350 tasks to be measured. Assum-

ing that each task takes 2 minutes to measure length and breadth with the tape, and depth with the measuring rod, the time occupied in measuring the 300 tasks, without any allowance for inevitable delays, would be 5 hours.

Question No. 18.—As far as I know no self-acting tests of any kind were imposed, and I may safely say none which were controlled in such a way as to be effective. The Famine Commission, paragraph (III), says the chief test is the exaction of labour. I think few will contend that in the early stages of the famine any practical attempt was made to enforce a task at all.

In the first place works were started in such haste that it was not possible to have them laid out or the tasks defined at all. Most of the works which were in my division were taken over from the civil authorities after they had been opened as relief measures. It was therefore difficult at first, and, indeed, for some time, to comply with the very clear instructions laid down in Bengal Government No. 420 M. P. I., paragraph 3 of which provides for the proper laying out of the work before start. Regarding the methods of organizing the gang as laid down in Bengal Government No. 420 M. P. I. though I have tried to comply with the instructions over and over again, I have found them quite impracticable. It is no doubt easy to do as the Chief Engineer suggests, and make a paper organization, but such an organization will only exist as long as the organizer remains to prevent people bolting or changing, and if the gang does work after being so organized for that day, it will have to be again reorganized the next day, if it turns up at all complete on the same work which experience has shown to be very unlikely.

The method of organizing, which by practice and experiment proved most effectual on task work, was not to allow gangs of less than 60 persons to work, to have one collecting gang only for people if they came in units or small numbers on to the work, the number in this gang alone being less than 60.

With a nominal muster roll it was found quite impossible to keep the numbers in the gang constant. The nominal muster roll I consider serves no useful purpose on task work, and the issue of nominal tickets is equally useless. The presumable object of the muster roll and nominal ticket system is to insure the constancy of the gang. This, there is no doubt, it does not do.

I have tried, and found to succeed, the following methods which I have given more fully in my report on the famine in the Darbhanga Division:—

- I. That the nominal muster roll be done away with and a muster roll with numbers only be substituted.
- II. That permanent tickets with serial numbers corresponding to the numbers in the muster roll, and having also the number of the gang stamped on them, be issued to the members. Such tickets might be conveniently cut from thin brass, tin or zinc.
- III. That the tickets be numbered 1—1,000 for the numbers of the gang and 1—10 for the gangs and I—VIII for the gang mubarris or pay masters.
- IV. That in order to give the tickets some value and prevent their being lost, a charge of 1 pie be made when first issued, and that they will be bought back at the end of the work for, say, one anna each; and that a lost ticket may be renewed for one anna.
- V. Tickets to be of different shape for different classes and sexes.
- VI. That a muster of tickets present be taken every morning provided only that the ticket is

presented by a person of the class, gang, and mate indicated on the ticket.

- VII. That the number of tickets issued to each gang should be limited to about 60 when the work is first commenced, and the balance of the 100 gradually issued as the staff obtains more experience.
- VIII. That the number of tickets issued in an ordinary charge should be limited to 5,000. The number of each class of ticket required can be fairly and accurately estimated if the probable lead and lift on the work to be done is known.
- IX. That payment be made by the gang mohurrir to each worker individually (in the presence of the gang and the officer in charge) on the production of the corresponding check or ticket to the number in the muster roll, which has been marked present on the certificate of the Overseer, on the back of the muster roll, that the task has been completed.
- X. Mates should be abolished as useless.
- XI. Nominal muster rolls are advisable for dependants and should be kept. Dependants and persons on gratuitous relief should on no account be allowed to have anything to do with the gang work or receive tickets or be entered in the same muster roll as the workers, as is provided in the Examiner's note on accounts to be kept. As my report deals more fully with this question, I would refer to it for further particulars and details.

Piece-work.—Piece-work was the method of relief adopted in part of my division for the construction of the Jainagar-Sakri branch line of the Tirhoot State Railway. I believe this is the only famine relief work in Bengal which has been done by piece-work and completely finished. As a relief measure piece-work is admirable; it has the advantage of getting a large amount of work done for a small expenditure, and if the rate is properly adjusted the earnings per day-unit ought not to be much greater than is the case on task-work.

* ANSWERS TO QUESTIONS.

No. 50.—Answer for Darbhanga Division.
 Roads 10 charges 14 works.
 Village tanks 18 „ 24 tanks.
 Railways 4 „ 1 Railway.

No. 51.—Answer for Darbhanga Division.
 (1) Unmetalled 82 miles.
 (2) Metalled ¼ mile.

These roads were merely tracks before the famine; they have most of them been raised about 2 to 3 feet.

No. 52.—Answer for Darbhanga Division.

Under one staff on a road work the day-units should not exceed 2,000 in a length of 5 miles of road.

No. 53.—The roads constructed as relief works were mostly constructed at an unseasonable time and some of them have never been properly finished or bridged. When these roads are completed and properly bridged they will be of the greatest possible service. As regards their probable maintenance this is a question for the District Board to answer.

No. 54.—There is, in my opinion, no room for the construction of any more new roads in the Darbhanga District though there is lots of room for improvement in those that exist.

No. 55.—I should consider metal collection a first-rate means of employment for famine relief, and in places where natural metal was not obtainable I would suggest the manufacture of black Jhama metal, from puddled earthen balls burnt in country clamps.

No. 56.—No.

No. 57.—As a relief work nothing can be better or more convenient than a village tank. It has all the advantages of any other work with the additional advantage of concentrated supervision. As regards the ultimate usefulness of tanks they certainly are of benefit to the village, and I should say from what was experienced last year, when 50 per cent. of the tanks in the country were dry, because they were too shallow, that tanks are most necessary.

No. 58.—The total number in the Darbhanga Division was 24 and in Madhubani 8.

No. 59.—An ordinary village tank varies in size from 200 feet square to 500 feet square. On a tank 200 feet square, employment could be found for 400 people, on one 500 feet square, employment could be found for 3,000 persons. A tank 600 feet square would be required to give relief to 5,000 persons, assuming the task to be 200 cubic feet per diem.

There is no means of preventing the whole population of a village applying for work when that work is at their doors, except by increasing the task to such an extent as to give no encouragement to persons who can find an easier mode of livelihood. The hardship on feeble persons by doing this is not so great as would at first appear, as the work being close to their houses all members of the family take it in turn to work for short times, often continuing to work during moonlight nights. This irregular sort of work at odd hours was usual on a few works where the works were directly surrounded by the village itself.

It might be possible, I offer it as a suggestion only, to prevent a large number of those who do not actually require relief applying for work by fixing stated hours for work and not permitting work at any other time.

As regards the supervision of small and scattered works, I would refer to the proposal I have made at length in my report as regards the organization of a division for famine relief. The same idea ought to apply to other departments equally, namely, every five charges should have a supervisor to direct, control and take orders on account of his five charges, there being an officer in charge and the usual staff in charge of each work.

Every five supervisors or at most eight supervisors should be under the control of a gazetted officer who is responsible only to the Collector.

No. 63.—I do not think the nature of the country in Darbhanga would permit the construction of any useful impounding reservoirs.

Question No. 67.—Owing to the failure of the rains last year Mr. W. King, Sub-Manager of the Darbhanga Raj, proposed and I believe successfully attempted to bund the Kamala river near Bassetta for the purpose of irrigating the neighbouring villages. It might be possible to induce the Maharaja of Darbhanga to pay the whole or part of the cost of erecting a permanent needle or sluice weir, so that the water might be raised at any time required. If a scheme of distributing channels was then prepared it would serve the purpose of giving relief in the next famine and go far to increase the productiveness of the area commanded and give room for a still further increase in the population.

No. 68.—Not clear.

No. 69.—This question requires too much consideration to be able to reply to it in the short time at my disposal. I have no doubt a programme embodying at least some of the points noted might be prepared. A programme of any sort is an immense desideratum.

No. 70.—As already noted, I have no knowledge of any programme being in existence previous to the late famine, certainly no programme was worked to. There were no plans or estimates as far as I knew.

No. 71.—

(a) : : : : 2 miles.
 (b) : : : : 20 „

No. 72.—I consider no work should be opened within the area commanded by any work, that is, within four miles at the very least of any other work, that is, of course, assuming that the original work was capable of giving employment to all who required it within the commanded area of 16 square miles.

It is unlikely that residence on works will ever be insisted on by law, and less likely that it will ever be practically carried out.

Compulsory residence.—A fixed task and fixed wage would be the most perfect form of famine relief, but would be very difficult to enforce in a country where a man has "kismet" always to fall back on as an excuse for not attempting to save the life of himself or his dependants.

No. 73.—In the early stage of famine, when scarcity had begun to touch the labouring class only, I think the plan suggested in this question might, with advantage, be tried in so far as inducements might be offered so as to tempt those in want of work to leave their district in considerable numbers. After the opening of relief works in any district I should think the execution of this plan would be difficult.

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No. 74.—Very much the exception.

No. 75.—Residence has not been a condition of relief at all.

No. 76.—*Vide* reply to question No. 72. I do not consider the advantages gained by making residence obligatory are commensurate with the extra trouble and supervision entailed.

I do consider that if the task is sufficiently high and the wage a subsistence wage only, that no more accurate test can be devised.

No. 77.—I have no reason to think that residence on the works is distasteful to the people at all. No attempt was ever seriously made to induce them to remain on the work, and all the works in the Darbhanga district were placed with the express purpose of giving relief at the very doors of the applicants.

There is not the slightest doubt in my mind but that residence could be made compulsory, and that large numbers would comply with this regulation, but whether all would comply or not I have no means of knowing, as no test was made.

No. 78.—Yes, certainly, if there was a proper organization ready beforehand and a definite and sufficient or more than sufficient programme for each district.

Task-work and Piece-work.—I have already stated my views on both these works. They are both suitable for famine relief and can be adjusted so that the average earning per male unit will be the same in each case.

Piece-work has the advantage of getting more work for your money, and should generally be used on such works as may eventually turn out to be revenue paying. The method of payments on task work, when properly done, ensures, perhaps, a larger proportion of the expenditure actually reaching the labour.

Piece-work is not suitable for weakly persons, old women and young children. The suggestion I have heard made of having a separate work with higher rates for these classes, is theoretical, not practical.

Every large piece-work would have to be supplemented by task-work, the quantity of the task and the rate of piece-work being so adjusted as to make the average earnings per male unit the same.

No. 84.—About 1 to 16.

No. 85.—No.

No. 86.—Yes. For able-bodied, see report.

(*President*).—You have been District Engineer of Darbhanga?—Executive Engineer of the Darbhanga Division.

Were you in the district before the famine began?—No. I arrived on the 11th of February. I knew the district before.

(*Mr. Higham*).—There were two Public Works Divisions in the district?—Yes.

Which was yours?—The Darbhanga Division.

What was the extent?—It comprised the thannas of Darbhanga, Singia, part of Warasnagar and the Jainagar-Sakri Railway.

Where did you employ piece-work?—On the Jainagar-Sakri Railway, on the Kamtowl-Berampur road, and on two other roads north of Darbhanga.

When did you commence piece-work on the roads?—When relief operations were being contracted at the end of July.

How many charges had you on the Jainagar-Sakri Railway?—I had four sections.

Had you piece-work on all?—Yes.

What was the unit of payment?—The mate of the gang was paid. The gang was the unit.

What was the size of the gang?—There was no restriction whatever placed on the size of the gang. Any number that liked to come were taken on.

Was 200 about the size of the largest gang?—That was unusual. 50 to 60 was about the usual size.

You paid one man the whole of the wages?—Yes; for the work measured on the day previous. We had also gangs as small as 10.

Did the average earnings differ in different sections?—Slightly. In one section the average earnings

would be one anna six pies, in another two annas, in another two annas three pies per male unit. It did not exceed three annas.

On which section were the earnings highest?—I am afraid to say without the figures.

What was the maximum amount earned by members of a particular gang?—That I am not prepared to answer either. It depends upon the constitution of the gang. The average rate per head per male unit would be from one anna six pies to two annas three pies.

Did any gang earn as much as four annas?—I only remember one instance in which Mr. Close brought to my notice that one gang had earned as much as four annas.

What was the minimum earned by a member of a gang; can you say?—No, I cannot. I don't think in any case it was less than one anna six pies; never less than the Code wage.

What was the Code wage?—It was an average of one anna per male unit.

Did they earn more on piece-work than on task-work?—What is the Code wage of an able-bodied man on task work?—One anna nine pies per male unit, but a female earns less, and the children less, and that reduces it. At Darbhanga the average was 2½ annas on piece-work and 1½ annas on task-work.

Were the earnings of any gang on task-work less than one anna six pies?—No.

Did you give different rates for piece-work?—No. We gave different rates only for different leads and lifts and different qualities of soils.

You never found that weaker men were unable to earn the Code wage?—No. We had no complaints in connection with it on piece-work. The people were quite content with the wage earned.

Do you think piece-work might have been introduced everywhere?—Yes, if it had been introduced at the commencement. I do not think piece-work is quite suitable for famine relief when the distress has reached any acuteness.

Are you of opinion that where you have piece-work more men come?—Yes, and a smaller number of women and children.

What system did you adopt in task-work?—The general lines were those laid down by Mr. Glass in No. 420 M. P. I. We had to vary in some instances. Payment was made according as task was sufficient. We tried to work on Mr. Glass' rules but found after a time that it was impossible to take measurements at all, so we gave it up and said, "We will fine you if the task is not complete." Eventually both on task and piece-work we had pits made of a fixed length and breadth, and then it was only necessary to measure the depth of the pit. During the famine we had to change three or four times. We began with Mr. Glass' rules and then went on to pits. We then found that the people would not do their full task. They would do an irregular piece in each pit. It was impossible to measure that irregular piece, and we could not fine them without doing so, so we said, "if you leave any work undone we will fine you"; we then paid them for a full task the full amount and for a short task the penal wage.

Supposing they did a very small portion?—We gave them the penal wage until it was abolished, when the rule became "if you finish your task to-day you will draw your wage." When the task was finished it was paid for (*i.e.*, Blackwood's system). Not more than one payment could be made in one day.

The amount of the pay to each gang depended upon the constitution of the gang?—Yes. Ultimately it depended upon the lead and lift of the pit.

Did you pay according to the gang theoretically required by the table?—The gangs were paid according to the muster of the gang.

Suppose the day after commencement two or three men were absent?—If it was a matter of only two or three no alteration was made, but if a large number were absent then they had to be moved into such pits as they could work with the reduced numbers. The men would be paid according to the muster of the day.

What was the gang on task-work?—Not less than 60 or more than 100.

Did the gang comprise several diggers?—Yes.

You did not pay each separately?—Some of the officers in charge did pay each gang as a pit gang, that is, two diggers and his party.

On your large gangs no payments were made till all the pits were finished?—No.

If one sub-gang had work and another had not, they all had to wait?—Yes.

(Mr. Bourdillon).—Were the large gangs so formed for statistical purposes?—Yes.

And the sub-gang was paid as the pit was finished?—Yes. This was the limited piece-work system.

(Mr. Higham).—How were payments made. To individuals or to the head of the gang?—They were made to the head of the gang in task-work.

You depended on the head of the gang for distributing the money?—Not altogether. The mohurrir received the money, and in the presence of the officer in charge the money was paid to them.

He was actually able to pay it to the gangs who had done their task?—Yes.

In regard to piece-work may I understand that you prefer making payment up to a particular depth?—Yes. Piece-work was also laid out in pits of such a size that there was no difficulty in a small gang completing one in a day. The pits were arranged so that at least one payment was made to each gang each day. There were no sub-gangs on piece-work.

On task-work every man could earn the Code wage but not more?—Yes.

He might earn a great deal below the minimum?—Yes, he might under the limited piece-work system.

Practically the Code system without a minimum?—Yes.

What was the proportion of workers under your control to the total number in the Darbhanga sub-division?—They were about equal.

Had you anything to do with the works under Civil agency?—No.

Did you ever inspect them?—I went on to the works for the purpose of getting information, but I never inspected them.

As regards these works under Civil agency who were they controlled by?—By the Collector.

In future the idea is that the Public Works Department officers should be placed under the Collector, that is, the Public Works Department is not to work independently of him. Do you think on this occasion the Public Works did work in connection with him?—They did not work independently of him. The Collector had very much to do with the works under the Public Works Department.

If your services had been placed at the disposal of the Collector would you have been able to supervise the other works?—Yes.

Did you try the system of numbered tickets?—Yes, for a certain period.

Was it tried anywhere else?—Not that I know of.

What was the advantage?—The advantage was that it did away with the disadvantages of the nominal muster roll.

You still had to keep a numeral muster roll?—Yes, for statistical purposes only.

You had to note the attendance on each ticket?—You read the number of the ticket instead of the name of the man.

(Mr. Bourdillon).—That saved trouble in writing up and correcting all the names?—Yes. It was so simple to take the muster roll when you collected the gang in the pits. The muster of the numbers only had to be taken and no mark for present was given unless the number was presented by a person of the class to whom the ticket belonged.

(Mr. Higham).—Did they string the tickets round their pecks?—No, they wrapped them in their dhooties or anywhere else.

Supposing you found that a particular number was missing and you made enquiries, the rest of the gang would not know?—That would not affect me in the least. I did not want to know who he was.

With a nominal roll if you made enquiries nobody would know who this particular individual was?—Yes, they would know who was missing as a rule.

When the gang was broken up were the tickets returned?—I suggested that Government should charge

one anna or two pice for each ticket in order to give them some extrinsic value, but the Collector would not agree, consequently tickets were continually lost.

(Mr. Holderness).—What happens if a D male comes with a B male ticket?—It is not reckoned.

(Mr. Higham).—Is there not some danger that the mohurrirs might put down tickets as issued?—One ticket can only receive one *hasari*.

The mohurrirs might put down certain tickets as present that were not present?—The facility with which a check is kept is very great. You can go down into a pit and in a very short time run through the gang. The danger is much less great with these tickets than with a nominal muster roll.

(Mr. Holderness).—I think you said that you think piece-work would not suit when scarcity is very acute. Will you give the reason?—The earnings on piece-work depend on the amount of work a man can turn out. If his capacity is limited, owing to his being in an enfeebled state, his earnings are limited. A suggestion I heard made was that this could be got over by giving every enfeebled person a higher rate. I do not think this practicable, because of the difficulty of preventing persons working on low rates wanting to come where higher wages were paid, and the discontent that might be induced in the minds of persons getting low rates by seeing other persons getting higher rates.

You didn't try it, did you?—No.

Would it be difficult otherwise in arranging it?—There would be no difficulty in arranging a thing like that.

In the scarcity at Darbhanga would it have been sufficient?—Yes, if introduced from the first all over the district.

If it had been introduced would more or less money have been spent on relief works?—Less, but a larger number of persons would have been gratuitously relieved.

That is on the supposition that you had only one rate?—Yes.

You could get over that possibly if you had varying rates?—If you had a subsidiary task work it would get over that better. The earnings on task work are fixed, and there would be no wish on the part of the people on task work to come to piece-work.

Would there be any inclination on the part of the able-bodied to come to piece-work?—Certainly there would be an inducement.

Might that not have been more expensive?—I don't think so. Task-work, as ordinarily done, requires, in order to be accurately done, a tremendous amount of supervision.

You must have a larger establishment for task work?—Yes, in proportion to the number of workers.

Suppose you had piece-work gangs consisting of able-bodied persons and then side by side you had task work gangs. Would not that be expensive?—They would not do it. The weaker members of a family are mostly women and children. In my opinion the males working on piece-work would earn sufficient to keep their families. It is not the custom for women to do work if their males are able to earn enough to keep them. They do not do it till they are at the end of their resources.

The higher wages on piece-work would be accompanied by a diminution in the numbers?—Yes.

Was there any difference in the classes of people on Civil agency and those on Public Works?—None whatever.

As far as you heard was the penal wage given up?—Yes, I believe so.

Do you think too many works were opened?—Yes, but I think it was very difficult to arrange differently. I think if some system of starting works had been made out, if some programme had been drawn up previous to the famine, a very large number of works could have been done away with. The difficulty we had was that there was no basis to go by, and some works were started without any consideration.

You had a district famine programme, had you not?—I have not seen it.

If you had to work the famine again, and had all the public works under you, would you have fewer works?—Yes, but that is not an easy question to answer. In the portions in which works were carried out I would have had fewer works. Take the case of the six Muratta tanks

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within a mile of each other. One or two would have been sufficient to give employment to the labour offering. It complicated supervision, and unless we had made them very large we could not have concentrated the labour.

Could a programme be laid down for larger works?—I think so.

In making out such a programme would you make it so that everybody could come and go to the work from his house?—I would not undertake to decide that point. I think it is a question for higher authorities. My experience on roads was that if a road was being made one mile out of a village there would be 2,000 men on it, if two miles out 1,000, if 3 miles out 500, and soon they would disappear altogether, and then you would begin to had a set of men from another village on it.

Did you draw the inference that these men did not require work?—They could not have been in very great distress.

They came when it was convenient, and not when it was not?—Yes.

The task and wage were not a really stringent test of necessity?—No. In the north of Darbhanga the test was more severe. The people followed the roads wherever they went. The task could be made sufficiently severe, and it seems to me that this is the only method left.

Have the works constructed been of real value?—The tanks most certainly are useful.

Of local utility?—Yes, they were excavated to water-level and are all filled.

Were the roads chiefly repair of village tracks?—Chiefly surface roads and raising of roads.

Were they improved?—The work was well done at the time. A great many have been spoilt by the rain. In some instances relief work ceased, and the roads were left covered with clods.

Is the present condition of the roads worse than it was before?—Parts of the roads are worse, but the greater part are better. In some parts we made practically new roads and these will require a good deal of repair.

(*President*).—What is the irrigation scheme you mention in your written statement in reply to question No. 67?—I am speaking about that without knowing much of the details. Mr. King bunded the Kamala river and irrigated a very large tract of the country. It appears that the permanent bunding of the river would be an advantage and would result in there being work for famine labour when distributing channels came to be constructed.

(*Mr. Higham*).—What was your establishment?—One officer in charge, a sub-overseer, 2 clerks and the gang mohurrirs.

Suppose the officer in charge is an upper subordinate?—His pay was charged to the works. The division salary bill had nothing but officers, assistant engineers, and sub-engineers.

The establishment charges really represent actual establishment employed in charge of the works?—I cannot say how the examiner has classified them.

What did your works charge establishment come to?—I cannot say.

At the Imperial Secretariat Building, Calcutta.

TENTH DAY.

Thursday, 3rd February 1898.

PRESENT:

SIR J. B. LYALL, G.C.I.E., K.C.S.I. (*President*).

SURGEON-COLONEL J. RICHARDSON.

MR. T. W. HOLDERNESS, C.S.I.

„ T. HIGHAM, C.I.E.

RAI BAHADUR B. K. BOSE, C.I.E.

MR. J. A. BOURDILLON, C.S.I. (*Temporary Member for Bengal*).

MR. H. J. MCINTOSH, *Secretary*.

MR. L. HARE, Commissioner, Dacca Division, called in and examined.

I put in a written statement of evidence.

1. I take up the points in the order in which they are indicated in the Resolutions of the Government of India (No. 31-237-2F., dated Simla, 25th October 1897, and No. 32-237-3F., dated 25th October 1897.)

2. *Classification of Relief Workers, paragraph 3 of Resolution No 31.*—I agree with Mr. Higham, in his proposals for the classification of relief workers into I Special, II Diggers, III Carriers; (2) also as to the wages proposed; (3) also to make no distinction between wages of males and females.

3. As to fixing a standard task for class III for each province, I think the area of the province is much too large. I would prefer to fix it for each district only, as conditions vary so greatly. What would be an easy standard in Behar would be a severe standard in Eastern Bengal. Again, the task should, in my opinion, vary according as the famine is such as to affect, first, only the labouring classes or, second, affects the cultivating classes or, third, affects also the bigger raiyats, and small proprietors who do not usually cultivate personally. To fix a standard which will be suitable to the non-cultivating raiyats, would be to let in on your hands an enormous number of those who are not labourers, but who are accustomed to work in the field with their own hands, even though there was no necessity to do so, and they had ample means to provide for themselves.

It would also inevitably draw all the labouring classes, and take them away from other employment which might be available for them. It is absolutely essential in my opinion if a famine is to be economically administered, and if Government are to limit their assistance to those only who require it, that the labour test shall be so strict as to deter all who do not really require help, and who can find for themselves, from coming to the works. If the labour test is to be relied on, it must be a real test for the actual people to whom it is applied.

4. Granting that the existing Famine Code with its minute classification on a famine relief work has proved unworkable in the field, it does not follow that all attempts to vary the task, with the varying conditions of the people as the famine deepens from stage to stage, must be abandoned. If works are opened early enough, it will be safe to put on at first a strict task such as labourers are accustomed to perform. As the famine deepens other classes will come in, before their resources are absolutely exhausted and will earn partial wages to supplement their own resources. Then their condition, and any sign of deterioration, if any should appear, will rapidly indicate whether it is necessary to relax the task.

5. In any famine administration, relief works are only one of many features, and the circle organisation with its detailed and minute enquiries comes in to supplement the experience gained on the works. This will at once indicate how the tasks are working and whether they are such as to

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drive off those who ought to come to the works. Whether the people are keeping off to such an extent as to cause physical deterioration will always be a question of fact. It cannot be decided *a priori* that a given task will keep them off unduly, because, as has been proved most conclusively, it is impossible for Government to ascertain what are the real resources of the people. If anything were required to prove this, it is to be found in the fact that in no district did the calculations and enquiries as to the resources of the people lead to the belief that these resources were anything approaching what they were actually found to be. And if it was impossible to correctly ascertain the resources of the people in so tangible an item as food-stocks, how will it be ever possible to collect accurate information as to their power of purchasing?

6. Therefore, I deprecate a standard task, except in a very general form, and I strongly maintain that if a famine is to be administered economically the task must be varied according to the circumstances, being high at first and gradually relaxed as necessity arises. A minimum task, however, below which it should not go, might with advantage be fixed for general purposes.

7. To clauses 5 and 6 about the Sunday wage I agree.

8. *Resolution No. 31, paragraph 4.—Piece-work.*—Piece-works, at the ordinary district rates or at all events at high rates, are, in my opinion, very suitable at the beginning of a famine, and they might be carried on throughout a famine when the works are of permanent utility. I would, however, in all cases work them directly by Government agency, and would not introduce any contractors. The piece-work system is, in my opinion, pre-eminently suited for the large works which, as is rightly said (in paragraph 5 of the Resolution), should be the back-bone of relief in a severe famine. I think experience has shown that piece-workers, where they do excess work, do it to earn money for members of their family, whom they leave at home, and where they earn anything considerably in excess of their immediate requirements generally take a holiday off. Unless the rates are unduly low, I do not think the risk of their earning any very excessive amount is serious.

9. Here, again, I would impress that famine relief must be treated as a whole, and that the Circle Officer must come in to see that there are dependants of the workers to be supported, and that they are duly supported out of the earnings, and not by other famine relief. Then, care can be taken to watch the payments on the works, and if it is found that any persons carry away unduly large earnings, measures must be taken to restrict their earnings, looking to their requirements as stated by themselves and verified by the circle officers.

10. The merits of piece-work as a system which is fully understood by the people, and which commends itself to their sense of justice, and which causes less demoralisation than the ordinary relief work system, cannot be exaggerated.

11. *Paragraph 5 of Resolution 31.—Programmes of Works*—I have no doubt that every effort should be made to provide large and useful works in all the districts liable to famine and in the neighbouring districts. Such works might very well take the form of what might be termed famine irrigation works. Thus, in North Behar large schemes of irrigation could be carried out as famine relief operations, which could not be expected to be remunerative directly, but which would so far be remunerative that they would be a considerable protection and would at least greatly reduce the area of future famines, if not be a complete protection in those areas. Such schemes should be carefully worked out by a special staff, if need be, in ordinary years, so that everything should be ready to begin work when the famine work is required.

12. As regards the possibility of drafting relief labour to considerable distances, much depends on the class of labour which has to be drafted. Also much depends on the attractiveness of the labour. We know that the labouring classes will go great distances very readily. Piece-work is popular, and large works carried on, on this system, would readily draw the labouring population, more especially if arrangements were made to give information and to furnish means of proceeding to the work. This class could also be rigorously excluded from the smaller works nearer their homes. When we come to the next two classes, the cultivating raiyats, and the raiyats and smaller proprietors, who do not usually work in the fields, the resistance to such drafting will be much greater. The whole family in many cases cannot leave their growing crops and their cattle with no one to watch them. Here, again, piece-work, which makes it possible for some of the family to labour and earn a main-

tenance for the others will facilitate drafting to a distance. To have to work at a great distance from home will certainly be a severe deterrent which, like a high task, will tend to keep persons away. Careful watch would have to be kept through the circle officers to see that it was not too severe a deterrent. Further, there should be organisation of the drafting and provision for forwarding persons of these classes. Arrangements might possibly also even be made for remitting parts of their earnings to their families. After looking into their circumstances by the help of the circle officers, certain persons on the local relief work would be told off to be drafted to the larger works, and would be given no other relief. It is not necessary to go into the organisation of the system of forwarding and dealing with such persons from their despatch to their return. The classes referred to, who would need special help and looking after, would not come upon Government hands at once, and there would be time to make the necessary arrangements.

13. I do not think that in a very severe famine the large works would wholly replace the smaller local works; a certain number of these would, I think, always be desirable for the persons who were fit to labour, but who could not with advantage be forwarded to the larger works. The numbers on such works would be reduced by all those who could possibly be forwarded to the larger works, and there would not be much difficulty in providing the necessary useful works for this residuum.

14. There is one point in connection with a programme of works which it is well to notice here and that is that in Behar, and probably elsewhere, tanks are much more popular than roads. Unless a tank, therefore, is really urgently required and will in itself be a more useful work than a road, it should not be taken up merely because the organisation of labour on a tank is simpler than on a road. On the contrary, looking to the fact that the labour test is to be a real test and is to be a deterrent to all who can support themselves without Government help, tanks should be avoided, unless it is found that the people are deteriorating in physique and that the road work is unduly deterrent. Proportionately the task on a tank should be more severe than on a road, if it is to be an equally severe test. The pressure put upon the local labourers by the petty maliks and by village opinion to work on a local tank is an artificial inducement to labour which requires to be counteracted. To make tanks which are not required, when there is ample work in making roads which are required, cannot at all be justified. Such conduct is shirking the difficulties of the situation instead of meeting them.

15. *Paragraph 6 of Resolution 31.—Responsibilities of Civil and Public Works Officers on Relief Works.*—With the views of the Government of India I entirely agree. The Chief Civil Officer must be supreme in everything. The District Officer, like the Commander-in-Chief of an army in the field, must have supreme authority, subject only to his own Chief, the Commissioner of the Division, and the Government above the Commissioner. If he is sensible, he will avoid interfering with his Public Works Department subordinates in matters of detail, and will exercise only a general control. If he behaves foolishly and shows himself unfit for his position, there is nothing to be done but to change him. The District Officer, must also determine the relations to each other of the Charge Superintendent and the Public Works Department officers and the officers in charge of relief works. This cannot be laid down universally, but must depend partly on the grade and standing of these officers and their qualifications. Just as now the Collector of a district does not interfere with his District Engineer on technical and professional questions in ordinary times, so it would be in famine times. But in all the matters mentioned by the Government of India the District Officer must decide, subject, of course, to his superior authorities.

16. As regards the position of the Public Works Department and the Charge Superintendent, looking to the fact that it is wasteful for two superior and inspecting officers to go over the same ground and to the large amount of time spent by such officers in travelling, the Charge Superintendent should look after everything in his area. I would put all works under the Public Works Department staff, and the Charge Superintendent would be usually assistant to the head Public Works Department officer in his area. But where the Public Works Department officer was of a manifestly inferior grade and qualifications, this would be reversed and the Charge Superintendent would inspect as the assistant of the Collector and not of the Public Works Department officer.

17. Similarly, the position of the officer in charge of a civil sub-division must be determined. He will generally be

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the principal adviser and assistant of the Collector for his own sub-division. But if there are Public Works Department officers superior to him in standing and qualifications, they will not refer through him, but will come direct to the Collector, and this Civil Sub-divisional Officer will act as the Collector's assistant, consulting with the Public Works Department officers and assisting them to the best of his power, and referring to the Collector all matters which he considers should come to his notice.

18. A certain amount of elasticity must be left in such arrangements, and to men of sense and forbearance there is little real practical difficulty in making suitable arrangements. I would strongly deprecate anything like giving the Public Works Department officers supreme authority or letting it be imagined for a moment that they were independent of the District Officer and were not bound to obey him. This would certainly lead to friction. They have always the means of bringing any matter to the notice of the superior authorities through the chiefs of their own department.

19. *Paragraph 7.—Accounts.*—As to the system of accounts, it is useless to say anything until it is known what the Government of the day will require. Every Famine Officer will wish to have them as simple as possible. Frequent changes in their form during the course of a famine is much to be deprecated. Sufficient attention has not been paid to the special conditions of famine work, and the Accounts Department have insisted too much on the ordinary rules of the Account Code. But the account rules in force in June, when I left famine work, seemed to be working fairly satisfactorily.

20. *Paragraph 3 of India Government Resolution 32—Gratuitous Relief.*—Assenting to the second circular of Government No. 32—237—3F., dated 25th October 1897, as regards gratuitous relief, I would point out that here, as in the case of relief works, some test is eminently desirable by which those who do not require Government help may be kept from coming on the Government hands. I know no more difficult and anxious question than to decide when the cripples, the lame, the halt, and the blind and diseased are to receive assistance. The object is to discover when the country-side absolutely refuses or is unable any longer to support them and when, if not fed by Government, they will certainly starve. In any year, at any time, in Behar, crowds can be collected of these poor miserable creatures. But ordinarily these poor creatures are able to find for themselves, and it is, in my opinion, the bounden duty of an officer in charge of a district in famine times not to give gratuitous relief to these classes so long as they can secure their usual means of support. To hit off the true mean between undue leniency and undue severity is a most difficult task, but one which an honest officer must not attempt to shirk. Anything in the way of a self-acting test is of great value, and there is no doubt that the giving of relief in the form of cooked food is a very stringent test indeed in most cases. Of course, it does not apply with as much force to the class of beggars by profession as to the more independent classes. I am of opinion that as it is the beggars and cripples who must first come upon Government hands, that the giving of relief in the form of cooked food may be very advantageously adopted as a temporary measure. But there are serious objections to its universal use. When the numbers to be dealt with are large the labour of feeding with cooked food is considerable, and either a large number of kitchens have to be opened, which it is very difficult to adequately control and supervise, or those relieved have to be collected in large numbers at one place, and many of them will have to leave their homes and reside permanently at or near the kitchens. My own view is that as regards adults the cooked food test may fairly and usefully be applied at the early stages of famine and generally when first taking on new persons on to the gratuitous list, provided that relaxations are made, in exceptional cases, of the more respectable people, after full and sufficient local enquiry and under special sanction.

21. As to the use so largely made of kitchens in Bengal for feeding children I am entirely in its favour. Such kitchens should be comparatively small and numerous, so that the children may not have to go unduly far or have to live away from home. They should be under the supervision of some local Magistrate, if no better officer is available. Even so, abuses may arise, but these will be of less consequence than the certain failure, at least in Behar, of the method of giving relief to children by grain doles. It is found that the children, especially the female children, do not get their fair share of such doles and become emaciated in consequence.

22. *Paragraph 4 of Resolution 32.—Relief in large towns to respectable families.*—As to the relief to respectable

families in large towns, I do not think that the plan adopted in Mozufferpur can be improved upon. Volunteers were called for, and the town was divided amongst them for purpose of enquiry. It is a good plan that they should work in pairs. Their lists were verified and tested by certain others—volunteers and officers—so as to have at once both an additional test, and to secure greater uniformity of strictness, care should be taken to select suitable persons for this very responsible duty. The volunteers also assisted at the distributions. The whole organisation was put under the immediate charge and supervision of a gazetted officer, working directly under the Collector.

23. *Paragraph 5 of Resolution 32.—Whether Relief should be uncooked grain or money.*—One of the many points to which a Collector's attention must be directed is the stocks of grain available to purchasers. An indirect effect of giving grain is that attention is necessarily directed in a practical way to the grain market. But, apart from this, I think it is well, at first at all events, to give grain rather than money. If money is given there will be a large number of purchasers flooding the dealers, and the latter will be inclined to take advantage of their position to run up the price. The real demand for grain will be the same in the one case as the other; but the dealers, when the purchasers crowd them, may pretend to take panic at the apparent large demand for grain, and in any case can put difficulties and delays in the way of sales, and thus get an excuse to run up their prices. It is easier to give the dealers warning by ordering in advance so many maunds of grain, and the exact amount required is easily calculated when grain is distributed. If money is given, it will not be known at first, or until after some experience, how much grain will be brought at the place of distribution, as some of the persons will naturally buy elsewhere. At first, therefore, and until things have settled down a bit, I would prefer to give grain. Afterwards, at a later stage, I see only two advantages in giving grain. Even at the beginning of a famine money may be given if due precautions are taken to secure that the persons so relieved can easily make their purchases at the market rate, on which the calculations are based. The advantages which occur to me from giving grain are that it is possible that at the early stages of a famine some candidates for relief may hold off if grain is given who would not hesitate to accept money. So far as the giving of grain operates as a test it will be useful. Again, it is easier to embezzle money than grain. Grain cannot be carried away conveniently, and though the value of grain not distributed to absentees can be secured by collusion with the grain-dealer, this is somewhat more difficult, as there are more parties to the fraud, and the fraud can consequently not be quite so easily concealed.

24. *Paragraph 6 of Resolution 32.—Poor-houses.*—I agree that the poor-houses should be weeded as suggested. This was done in Mozufferpur. There is no particular object in sending an inmate to the sub-divisional poor-house. If he is a resident of the district he may be sent direct to his home, otherwise he may as well stay in one poor-house as another. But I think where an inmate is a resident of another district, he should be transferred to a poor-house in his own district, as enquiries can be more conveniently made there, and from there he can be conveniently sent to his own home.

25. *Paragraph 7 of Resolution 32.—Orphans.*—I have nothing to add to the provisions of the Code as regards orphans.

26. *Paragraph 8 of Resolution 32.—Weavers and Artizans.*—I have no experience in dealing with weavers and artizans.

27. As regards general considerations, I think it well to insist on the necessity of a liberal scale of establishment for a famine campaign and to give a few practical suggestions as to the best way to secure them. As soon as it becomes clear that a large staff will be required, every effort must be made to pick out the very best of the candidates who come forward. For circle officers it is desirable that men in a position to give considerable security should, if possible, be selected; such men will be of a better, less needy, and more reliable class. It is well that, even if they cannot give personal security, that other men of position and standing should be willing to give security for them.

28. For these and for relief work officers a margin of candidates should be engaged in excess of immediate requirements and trained and kept in reserve. It is certain, as experience has proved, that a large number of these officers will break down, will resign, or be found unfit and have to be replaced. It is absolutely necessary to have men to fill up such vacancies without delay. Also, until the climax of the famine is reached, officers will continue to be required for new appointments, principally on relief works. These

men cannot be engaged and trained in a day, and a sufficient number of men to meet the probable future requirements should be secured and put into training before their services are actually required.

29. For relief works, the work on which requires a certain amount of technical experience, there should be a school started. It should be a good sample work under the best officer available and, if possible, should be near head-quarters. Accepted candidates should all be put for a short apprenticeship through this work, and should be drafted off to independent charges only as the officer in charge certifies them to have sufficient experience to run alone. Nothing can be more unfair to the candidates or more fatal to good work than to rush them out with only a Famine Code in their hands, to carry out a relief work as best they can without any experience as to how it should be administered. If the candidates, on the other hand, all have a short training in the same school, uniformity of system and working is secured.

30. Those remarks apply both to the civil agency which is to act as officers in charge, and to the work agents, of relief works. If a sufficiency of Public Works Department subordinate officers can be obtained to fill all the posts of work agents, this will be well; but if not, men for this office must be trained *ad hoc*, and the best way to train them is to put them through a short course on a suitably selected work or works.

31. Hints or suggestions to the above effect might, I think, very usefully find a place in a revised Famine Code.

32. I wish to add a few remarks to what I have already said.

33. As regards the important point of the task, I wish to point out that the exaction of a full and fair task from relief workers is entirely in accordance with the wishes and intentions of the former Famine Commissioners as expressed in the Bengal Famine Code. Thus we find that in paragraph 66, the standard of ordinary district labour is taken for the professional labourers. An arbitrary reduction is then made for classes B and C, and it is significantly hinted that no reduction may, perhaps, be needed in the case of B class labourers.

34. In addition to the arguments which I have already advanced in my former letter, I would add that the exaction of a full task will very greatly tend to encourage and develop self-help and reliance and prevent demoralisation of the recipients of relief, and it will also diminish the facility for fraud by the supervising staff, which a low task admits and encourages.

35. I think it is clear that if the people realise that Government will in the last resort step in to keep them from starvation,—a confidence which will keep them from despair— it is also necessary that the help shall not be given on such easy terms as to make it more attractive to sit down and let things take their course than energetically to do what can be done to save the situation. Nothing could have been more remarkable or commendable than the way in which the people of the Sitamarhi sub-division worked to irrigate their lands by making shallow field wells and lifting the water over their fields, thereby securing very large areas of catch crops which could otherwise not have been raised. This exertion on their part was, I believe, not a little due to the fact that in the last previous scarcity they had only been given relief on the performance of strict tasks.

36. Now that it is proposed, as it has been found necessary, to do away with the classification of labourers on relief works as prescribed by the Code, care must be taken that the task is not unduly cut down by reducing it for all labourers to the standard of the weakest labourers.

37. As to the facility which a low task affords for fraud on the part of the staff, I would point out that, if the task is unduly low, it can be performed by a smaller number of persons than actually attend the works. It is then easy for the officer in charge to add names to the attendance register and to pocket the wages said to have been given to the absent persons. This is an exceedingly difficult fraud to guard against, as the books nearly always show more names than actual workers, i.e., some people do not attend regularly, and with this class their evidence as to what day they actually attended would not be very reliable, even if it were possible, after the labourers have dispersed for the day, to examine them all to test the attendance registers. Of course, on the day of inspection, the attendance registers could be correctly kept.

38. On the other hand, if the work, measured up as a whole and divided by the number of attendants, gives a satisfactory task, there is a smaller margin upon which to

operate in this way. If the labourers are unduly cut, they may be trusted to complain. But they know nothing as to what their task has been represented to be. It must be remembered that, while it is not possible to test the work by pit measurement, except for work going on at the time of inspection, for which it is useful and necessary, it is always possible to measure up the work as a whole at any time. This is a most valuable test, and should always be done as far as time and means permit.

39. A most important consideration I have omitted is the necessity of fixing for each work the maximum number of labourers who can be taken on to it and employed at one time. In the case of large works which can practically employ any number of labourers, the unit of working has been fixed at 3,000, and the work is divided into sections, each holding that maximum number. But there are many small works which have not capacity for holding that number without over-crowding and consequent confusion.

40. It would be a great mistake to say that no such works should be undertaken. There may be times when circumstances absolutely necessitate such works, as when labour has to be scattered on account of an epidemic. But at all times the most useful works should be undertaken. At a given place a number of small works may well be of far more value than one large work. The importance of getting the best return possible that can be obtained for the money which has to be spent is so great that as little as possible should be sacrificed to convenience of working. Thus, in North Behar, where tanks cannot be used for irrigation, except by the laborious process of lifting, a number of small tanks are of much more use than one large one of the same aggregate capacity. Similarly, improving small village roads where a full system of main roads has been constructed will be of far more local benefit than the construction of a new main road. In such small works the number of persons which the work can conveniently employ at one time must be calculated as well as the total amount of work they will furnish. The rule that every one who comes to a work must be employed on it must be abrogated, and when one work is full other works must be opened. The attempt to crowd more persons on to a work than it can hold must inevitably lead to confusion and make it impossible to exact a full task. Thus, in tank work space must be left between the pits for paths. If the pits are 10 feet square and the path 5 feet broad, a tank with a mean floor area of 150 feet square would have 100 working pits, and with an average of one digger and three carriers to a pit, could employ conveniently at one time only 400 persons. These figures might be varied, but they indicate the nature of the calculation. Similarly, on roads where the earth-work to be done was small, it would not be convenient to employ more persons than would cover two or three miles in the day. The cost of supervision to labourers employed need not be much greater on such small works, if they are carefully grouped, than on large works, as the staff can be on a lower scale of pay. Even if the cost of staff is somewhat proportionately greater, the necessity of the case, or the greater value of the work done may fully justify the increased expense. But the necessity of limiting the number of persons employed on each work to the number it can conveniently employ at one time must always be kept in view.

41. The encouragement of self-help by giving rewards for the construction of shallow field wells was, I consider, a useful measure in Mozufferpur. Such works are, of course, only suited to certain places and certain soils.

42. A few minor suggestions which I have to offer are that the famine forms should be such as to permit of slip headings being used. Any duffry can prepare blank books of the required size, and, if slip headings are used, the books can be locally prepared much more quickly, and this is a most important point, since the non-supply of proper working forms is a fruitful source of confusion. Besides, if any change in the forms is necessitated, the new slips can be substituted in the old books already in stock in a very short time, and there need be no waste of forms.

43. Equipment lists should be prepared for every class of officer. New officers starting on a work without previous experience cannot be expected to prepare indents of their requirements. Besides, the usual method of getting estimates of requirements by indent is too slow.

44. Maps are useful and, indeed, necessary. The mujmilli maps prepared by the Survey Department were invaluable in Mozufferpur for fixing circles and securing that every village was accounted for and no village put into two circles.

45. It was found in some cases that the Bohari labourer attempted, and not always without success, to intimidate the officer in charge if he was a weak man. Several of the

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Bengali Babus imported complained of this. In such cases the chaprassi must be a stout, capable man who can secure his chief from all danger of personal violence. Otherwise the danger is that the immediate fear of the cooly will be greater than the remoter fear of the Collector, and that rules will be slackly worked.

46. The orders contained in sections 24 and 27 of the Bengal Famine Code might be put more conveniently with major and minor headings. Additional points which may be added during the course of a famine should be given a definite position in the report. The plan usually adopted for ordinary provincial reports is suitable.

47. As regards Form 13 of the Bengal Famine Code there should not be a circle serial, but a serial for the village only. The village can be serially numbered. This admits of bringing in fresh persons at any time in any village list without breaking the serial.

48. Form 14 would be similarly modified, and in addition columns 3 and 4 should be changed and headed by the name of the grain given. The amount given to each person can then be written and totalled at the foot of the page.

(President.)—You are Commissioner of the Dacca Division?—Yes.

You were before Collector of Mozufferpur?—Yes, till the 12th of June.

Do you agree with Mr. Higham's proposals for the classification of relief workers?—Yes.

Were there any professional diggers among your workers?—Yes.

Were there many?—For a long time they were the principal workers.

The bulk of the Noonias would go into the digger class?—No, I should think not. There would be enough to supply all the digging wanted.

My point is that Mr. Higham means there would be only a few in the special class?—Skilled men for dressing and for laying out the task.

Why do you think there should be no distinction between the wages of males and females?—I think it simplifies matters, but I don't lay much stress on that.

Do the females earn the same wage as males?—If they work hard they get as much.

In paragraph 3 of your written note you say, with reference to the fixing of a standard for class III, that what would be an easy standard in Behar would be a severe standard in Eastern Bengal?—Yes, that is to say, that there is a very small working class in Eastern Bengal. All the work is done by men from up-country, all the earth-work I mean. No man in Bengal will work in his own village if he can help himself. He will move east.

Is it considered a low business?—Not exactly, but it doesn't keep up his social position.

In Eastern Bengal are they all cultivators?—There is a very small indigenous labouring population. It is more the social stigma that stops it than anything else. Then, they get higher wages east, while the price of food is the same.

Do you think that with a light standard there will be on your hands an enormous quantity of people who are not labourers, but who are accustomed to work in the field with their own hands, even though there is no necessity for them to do so, and they have ample means to provide for themselves?—In Tirhoot and Behar I think so, but not in Eastern Bengal. I think the social stigma in Eastern Bengal would keep them off. In Dacca and Mymensingh we could not get workers for tanks.

Was that private work?—Private as well as public.

When they refused work on Government works they did not get work elsewhere, or did they?—They refused work on private works also.

They got on well enough without it, did they?—Yes.

Do you think they managed to get on by borrowing from *mahajans*?—I don't know where they got their money from. I think they depended upon their resources, but they certainly did borrow: that is proved by registration.

Was there a greater failure of the crop in Eastern Bengal than in Behar?—No, nothing like the same.

When you insist upon the necessity of a real labour test you are referring chiefly to Behar, are you not?—

Yes, principally; wherever there is a large labouring population.

In Eastern Bengal the dislike of going to work would itself be a test?—A very strong test.

Even in Behar the class that will come on to relief works and work for what, after all, is very small pay, if not in actual destitution yet are clearly so near it that there is no great objection to their applying for and accepting relief?—It is impossible to say what the destitution of the people was; we failed utterly to find out what the stocks were. It is absolutely impossible for any person, either official or non-official, to say, You must rely entirely upon your special organization. You break the self-reliance of the people if you let them on too easily.

Is it good economy to put so strict a test as that? People will wait till they have exhausted all their small reserves before they come on to works?—No. They will not wait till they have exhausted all their own reserves. If the standard is high, and well within their powers, they will come on when they think it necessary.

You say in paragraph 5 that if anything were required to prove this, it is to be found in the fact that in no district did the calculations and enquiries as to the resources of the people lead to the belief that these resources were anything approaching what they were actually found to be. In what way did you ascertain this?—Because they lived through the famine with less help than we expected. You must rely on reports.

Have you irrigation only in years of deficient rainfall?—I fancy so. The position in Northern Mozufferpur is that the rivers dwindle, so it would therefore be necessary to take the water only when you could get it.

What officers had you usually as Charge Superintendents?—Planters and Military Subalterns, Junior Civilians, Police Officers and a few Deputy Collectors.

How many Deputy Collectors had you?—Four.

What did they do?—They helped on miscellaneous works.

How many Charge Superintendents were there?—Nine, and they went up to 11.

You say in paragraph 16 of your written note that you would put all works under the Public Works Department staff, and the Charge Superintendent should look after everything in his area. That is for inspection, I suppose?—To help in inspection.

Was that what was done in Mozufferpur?—We got the Public Works to look at our works as they went by, and we looked at theirs as we went by, principally to assist, but did not pass orders or make complaints.

Was there any friction?—None whatever.

Was there any difficulty with your accounts?—I think they were pretty well in hand.

You say in paragraph 21 that kitchens were largely used for feeding children. Was that on relief works?—No.

At village centres?—Relief centres I should think; we had three or four kitchens in a circle.

At what stage did you introduce the kitchens?—Pretty early (in April); we found that the children were deteriorating.

(Mr. Holderness.)—They were most largely used towards the end, were they not?—Yes.

When a mother was given gratuitous relief the children were told to go to the kitchens?—Yes.

(President.)—What class of children were they?—They belonged to the very lowest classes.

Do you suppose the mothers kept the grain doles intended for the children for themselves. Were they sufficient?—The children did not get them. They sold their doles frequently.

(Mr. Holderness.)—Do you think that when they began to get their dole they were better fed than in ordinary times?—I think there is very little doubt of that.

What was the allowance of grain?—Seven lbs. a week for adults and 3½ lbs. for children. It was the Code ration.

These people in ordinary times would earn something, would they not?—There are a great many cripples and others who would not. I do not think there is a presumption that the dole is insufficient because the children were pinched by the mothers taking their share. The adults

flourished on their own dole, after the children were sent to kitchens.

(President.)—You say in paragraph 23 of your written note that grain cannot be carried away conveniently, and though the value of grain not distributed to absentees can be secured by collusion with the grain-dealers, this is somewhat more difficult. I do not quite understand that?—Unless the Charge Superintendent is able to be present at relief distribution, you have got a man who may embezzle. He has always got a list larger than the number present, and if you come to make enquiries it would be impossible to prove if the men on the list were present or not.

Did you have Contractors, to supply the grain for distribution at relief?—No. We gave the order to the biggest man at certain places, and as far as possible the Charge Superintendent tried to be present at such times.

Was relief given in uncooked grain?—Yes. Latterly we gave them money. I think it had a good effect in allaying panic.

Did the people generally get grain at the market prices or had they to pay higher?—It is very difficult to say. I think very often they had to pay higher. I don't think the difference was very much. There was a time at Mozufferpur when they refused to sell at the market rates; we had to bring pressure on them.

(Mr. Holderness.)—What establishment have you for the collection of village revenue?—In Bengal it is necessary to have special famine establishment, because we have no officers of the Tahsildar class. The only officer who covers the whole ground is the Chowkidar and he is not reliable.

In a future famine would you employ European soldiers as Circle Officers?—No, they do not know the language, but I would employ Military Officers as Charge Superintendents.

Would you take native Military Officers as Circle Officers?—No, I would supply them from the district: I found soldiers as a rule good on works when discipline is wanted.

Do you think if piece-work had been started at first it would have been sufficient?—It is hard to say. It might have been.

Would you have tried it?—Yes, certainly.

In a similar famine would you begin with piece-work?—Yes, but I don't think it would do alone.

That might depend on how you conducted your piece-work. If you might have differential rates?—It would be necessary to have different works. I do not think it would do to have different rates on the same work. We were working with a rather indifferent establishment.

If at the beginning of a famine you introduced piece-work, would that not tend to reduce the numbers coming on to works?—I think so.

Possibly the average remuneration per male unit might be higher than on task-work?—It might be.

Every man would earn some thing for his dependants, would he not?—Yes.

It might help to keep down the numbers on gratuitous relief?—Yes, I think the dependants who now come would not come. Before we gave gratuitous relief every village was carefully searched through and only those really requiring relief were allowed to come.

Simultaneously with the opening of piece-work would you start gratuitous relief?—I would have enquiries made first.

When would you open kitchens?—As soon as I saw signs of emaciation and while completing village enquiries.

In choosing persons to whom gratuitous relief was to be given, would you insist on every man who could do a reasonable amount of work going on to the works?—Yes, if possible. But it would be difficult if you had only a few large works.

Would you prefer a great many small works to large works?—It is difficult to say. I fear the latter system would deter people from coming.

Was your district programme defective in not having sufficient large works which could be started at once?—There are no big works in our district.

I understand that possibly irrigation works could be found which would be of some value?—Of no great value.

You prefer road work to tank work?—You must take the most profitable work, that is my reason. Afterwards that road work turned out to be a deterrent.

You found that it had the further advantage of acting as a deterrent?—Yes. The maliks want the tank and they want the labour all round them. It won't suit the maliks to have to send to a distance for it.

Some people said that the Behar peasant would not go beyond a limited radius to reach his work?—The professional labouring class will go a long way, I think.

Then there are other people who want to be provided for?—I don't think big works will be alone enough, for that reason.

You don't think your tasks were unnecessarily strict?—No.

Was there any wandering?—No.

Do you think that on the whole the people who received gratuitous relief were those who really required it?—They could not work, that's certain. We made very careful enquiries, but it is difficult to say.

Was the result of the relief measures that the death-rate was not excessive?—No, better than usual.

Were there any starvation deaths?—None.

Were any bodies picked up on the roads?—No. I never heard of any.

(Dr. Richardson.)—Except for the children the rest of the people seemed to be in good fettle, did they not?—Yes.

The relief was quite sufficient?—Yes.

(Mr. Holderness.)—If you were working the famine over again would you work gratuitous relief in the same way as you did?—Yes. But I should like to have the cooked food test earlier; then, when a person has submitted to that for some time, it is clear he has not got other resources.

When you first started was there a tendency to pass the poor on to the care of Government at once?—Yes.

(Mr. Bourdillon.)—Was it difficult to get kitchens supervised?—Yes.

(President.)—Was the great rise in prices of the common food-grains which occurred in September to November 1896, and was more or less maintained for the next 12 months, in your opinion a reasonable rise? That is to say, was it fairly proportionate to the failure of harvests, lowness of local stocks, and cost of replenishing them? If you think the rise was more than reasonable, to what do you attribute it?—I should say quite in proportion to the general failure. I think prices ought to have gone up.

In market towns which came under your observation, was it possible to identify the persons who fixed the bazar or current rates of food grains declared from time to time. How far were their current rates strictly followed by the local retail traders?—I suppose the biggest mahajan would fix the rates and the others would follow.

What material fluctuations of prices of grains occurred in the 12 months after 1st November 1896 in the distressed area under your observation? To what did they seem due, and was the trade sensitive? That is, did grain flow in quickly and freely in response to each rise of price from accessible markets where prices were lower?—If not, state what in your opinion were the reasons or obstacles which impeded the activity of trade?—For a short time I was beginning to be afraid that grain would not come in, but we were recommended to a firm who brought up a quantity of Burma rice. I think that gave confidence and prevented prices from going up.

Who were these men?—They were men from Calcutta.

They opened stores?—Yes; I only put them in the way of finding godowns. There were difficulties owing to the want of cash by traders.

Were there other obstacles to local trade being active?—No.

Suppose that instead of relying entirely upon the action of private trade and the Indian market, the Government had resolved to import grain from abroad to a notified amount and for a strictly limited purposes, that is, for use at a large number of its poor-houses, kitchens, and relief works. Suppose also that Government so imported either directly or through contractors, and adopted all possible precautions against obstructing the movements of private trade. What effect in your opinion would such action have had (1) on the cost of relief to the State; (2) on the prices of food grains in the bazars or open markets;

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(3) on the activity of private trade?—I think any interference would have been fatal. It would have broken confidence. They would not have known where Government was going to stop.

In the district under your observation had you ever good reason to believe in the existence of local rings of grain-dealers, formed to keep up prices of food grains above the rates naturally resulting from the law of supply and demand?—I never found out anything about local rings.

If you think such rings can be successfully formed at the present day in India, can you suggest any legitimate method of breaking them, which would in your opinion have the desired effect, and be on the whole distinctly advantageous?—You can do something by encouraging men to come from outside and promising them adequate protection.

(*Mr. Higham.*)—It has been suggested by one of the officers on relief works that it would be quite possible to do away with nominal muster rolls and issue tickets instead?—I see no advantage in that.

Supposing the ticket system is successful, would you require the muster-roll?—The muster-roll is wanted for other purposes than the work itself. The Circle Officer requires it village by village for his inspection purposes.

Would you take a daily muster-roll?—No, once a week or fortnight, and test it as often as possible.

Any fluctuations would be very suspicious would they not?—Yes.

How do you check that?—The Circle Officer should make special enquiries in the village.

Do you consider it necessary to have a minimum wage on task-work?—Yes.

If the man does no work he gets nothing?—Yes.

And if he does short work he gets short wages?—Yes.

Do you think it would be a good thing to have no minimum at all?—I suppose you should have a minimum of some sort.

Mr. C. L. RUSSELL, Sub-Divisional Officer, Sitamarhi, called in and examined.

Mr. C. L. Russell.
3rd Feb.
1898.

I put in a written statement of evidence.

My experience is entirely confined to the sub-division of Sitamarhi, in the Mozufferpur district, where I was Sub-Divisional Officer from the beginning of the famine up to the month of June 1897.

RELIEF WORKS.

At the beginning of the famine no definite orders having issued as to the exact way in which relief works should be conducted and the tasks which should be exacted, it was necessary to ascertain from actual experience what was most suitable in these respects.

At a later period orders were issued by Government. The task prescribed is shown in paragraphs 151 and 152 of the final report for the Patna Division. The task for diggers was laid down as—

	Feet.
Soft soil	200
Medium soil	125
Hard soil	83

As to the carrier's task, a typical example is given in paragraph 152, which shows the constitution of a normal gang working in light soil. The gang described consists of 4 diggers and 12 carriers. Supposing the majority of the carriers to be women (*i.e.*, $\frac{2}{3}$ of a male unit), and setting off the children carriers ($\frac{1}{3}$ or $\frac{1}{4}$ of a unit) against the men carriers who count as one whole unit each, it may be taken that these 12 carriers represent approximately 9 male units. Thus the whole gang consists of 13 male units. The task assigned is to dig and carry 800 cubic feet, and thus works out to 61.53 cubic feet of soft soil per male unit to be cut and carried for the shortest lead and lift under consideration.

At a later period orders issued that all soil should, as a rule, be treated as soft. This practically had the effect of increasing the task in medium soil from 125 to 200 feet.

From actual experience in the early part of the famine before definite rules were laid down, I am convinced that the former task was much too light and the amended task somewhat too light to form a really stringent test of necessity.

In the earliest days of the famine numbers were small and therefore more easily supervised, and from careful measurements of work actually done at that period I am convinced that it is not too much to demand a task of 100 cubic feet of medium soil to be dug and carried within a lead of 100 feet or a lift of 10 feet or a corresponding combination of the two factors, say, 50 feet lead plus 5 feet lift. This task I have repeatedly seen completed in rice lands of average stiffness by gangs of workers rather below the average, both in physique and also in the preponderance of women and children. I should thus say that to ensure a stringent test it was necessary to aim at the following outturn per male unit:—

In light lands (such as most *rabi* and *bhadoi* lands), 125 cubic feet.

In ordinary lands (including most rice lands), 100 feet.

In extraordinarily stiff lands, 75 feet.

This includes digging and carrying within the above-named leads and lifts. Where the lead or lift is great, the

question arises as to the proportion of carriers to be added. Various formulæ have been suggested to determine the number of men, women and children to be added to compensate for the increased lead. The practical test of efficiency is still, however, the outturn per male unit. A fair practical allowance was found to be a reduction of 20 per cent. for every additional 100 feet of lead or 10 feet of lift.

Where the above tasks were demanded it was found that the attendance on the works was small, but that those who came were just the class of persons to whom it was desired to give relief on works, *viz.*, the weaker and poorer classes of common labourers. The more robust and the more well-to-do still found and preferred ordinary employment, although even at that period this class showed their readiness to come to the works in large numbers the moment a weak officer in charge allowed any diminution of the task.

Compared with the amount of the task exacted, the amount of wage offered was found, from the point of view of affording a test, to be a less important matter. Thus large numbers would willingly stay on a work and do an insignificant task for a minimum or penal wage who would not do a fair task to earn a liberal wage. To check this I think it is necessary to lay down clearly that an officer in charge has the power to warn workers off the work for a period. Such action need never be attended by any risk of starvation, for it is, as a rule, the strong and robust who are in this respect the worst offenders and endeavour to induce their fellow workers to follow their example. Those really in need of relief are, if properly managed, the most ready to do a fair task.

The distance test was never applied, nor do I think it would be safe to apply it. The labouring classes will undoubtedly travel long distances to obtain work when once accustomed to do so and when the terms offered are generous. Where the latter condition is not fulfilled, they are extremely reluctant to leave their homes, and the risk would be great *firstly*, that at the beginning they would hold off works too long, and *secondly*, that they would not return so easily after the strikes which from time to time take place. To increase the task is to increase the outturn of good work done; to lower the wage is to decrease the expenditure—both objects desirable in themselves; but to apply a distance test for its own sake is purely artificial and necessitates the extra expense and the extra responsibility of providing living accommodation. A further distinct advantage of numerous small works is that it is possible, without breaking up homes, to hand over to the gratuitous relief agency the dependants who, if taken on works, only encumber and demoralize.

The difficulty of finding staff for numerous small works need not exist if, the moment it is clear that scarcity is inevitable, steps are at once taken to collect and train every person who is likely to be of the least use as an officer in charge or other subordinate. The extra expense involved in the entertainment of this staff before it is actually required is as nothing compared to the money which an untrained officer may waste on a relief work in a few days. For such subordinate posts trained laymen were found to be quite as good as many who professed to have had a technical education.

As to the question of the class of work to be provided, I am strongly opposed to tanks. Only one tank was, I believe, taken in hand as a relief work in Sitamarhi sub-division during the whole famine operations. Had more tanks been dug,

I believe the numbers attending would have been much increased.

In Behar a tank when completed is merely a convenience for bathing and watering cattle: as such it is open to strong sanitary objections. As a means of irrigation, its cost is quite incommensurate with its results.

GRATUITOUS RELIEF.

The organisation by charges and circles was found excellent for the administration of gratuitous relief. The circles as formed in the Sitamarhi sub-division were, I believe, smaller than in other districts. Their areas varied roughly from 25 to 30 square miles. This was found to be a great advantage, as it enabled the Circle Officer to be more perfectly in touch with his circle, and, therefore, better able to keep his relief lists down without fear of ill-consequences. When kitchens were opened the advantage of the small area of the circles was still more apparent.

Another means by which it was possible with safety to keep down numbers was found in two lists kept by each Circle Officer, showing (1) the names of all persons who, as falling under one of the five heads referred to in Chapter X, were entitled to receive gratuitous relief as soon as they should require it, but whom the Circle Officer did not yet consider in need; (2) of dependants who would be entitled to relief as soon as their supporters themselves went on relief works, but not ordinarily entitled otherwise.

From these two lists the Circle Officer from time to time transferred names to his register of persons actually in receipt of relief.

By taking at random a Circle Officer's two lists and his relief register for any village and comparing them on the spot, a Charge Superintendent was at once in a position to see whether a Circle Officer's work was being thoroughly done, and exactly at what point he was drawing the line between persons whom he thought fit and unfit for relief.

The actual distribution of relief was made weekly at the circle head-quarters. All recipients of relief were made to sit in rows in some open space of ground. Each village had its separate row within which the recipients of relief sat in serial order according to the number on their tickets. Each spread in front of him the basket or cloth in which he wished his dole to be placed, and was not allowed to remove it until all had been served. Discipline was soon enforced, and it was found that 1,000 persons could thus be given a grain-dole in about three hours. Any inspecting officer arriving during this period could see at a glance whether the dole placed before a man was the full amount to which his ticket showed him to be entitled.

It further gave the Charge Superintendent an opportunity of inspecting those placed on relief by the Circle Officer and of weeding out any who were fit to be sent on relief works.

Lists prepared by the police were found to be practically useless, being based on the estimate of the village chowkidar, who hoped himself to partake in the doles procured by his recommendation.

With the most careful scrutiny it was still found difficult to know where to draw the line and to whom to give and to whom to refuse relief among that very large class of persons who never have any means of subsistence other than the charity of their neighbours.

In this respect kitchens would have provided a most useful test. During the earlier part of the famine this test was applied by various private persons, and found to work well. In the case of persons of the higher castes, such a test would not be fair, but the masses of applicants for relief were of the lowest castes, in whose case it is quite permissible. Prejudice undoubtedly exists, but much of it is fostered by petty village officials who hope to partake in the spoils if money or grain be given. Such a test is especially useful at the beginning and at the end of a famine. To maintain kitchens to feed throughout the larger numbers who would doubtless have recourse to them would probably be difficult of organisation, but this does not affect the principle of the test. Once an applicant's necessity is clearly established, his name can, at discretion, be transferred to the grain dole list.

For children, kitchens cannot be too strongly advocated as the only sound form of relief. In Sitamarhi the kitchen system was largely adopted, though here also considerable prejudice had to be overcome at first. The circles being small, it was found that children could easily attend daily at the circle head-quarters. The change wrought when a child in receipt of a grain dole was removed to a kitchen was patent to the most casual observer.

The superintendence of planters and other Europeans was most helpful in organising these kitchens, but with careful supervision by the Charge Superintendent, kitchens were no less successful at very many of the circles manned by native officers.

In the above note I have made no attempt to deal with all the many debateable questions which have arisen, but have merely endeavoured to indicate one or two points which have most been forced upon my attention during the late famine operations.

(President.)—You were Sub-Divisional Officer in the Mozufferpur district?—Yes.

You say that in Behar a tank when completed is merely a convenience for bathing and watering cattle; as such it is open to strong sanitary objections. What were the objections you speak of?—When made for bathing and watering cattle they are generally near the houses of the village. Dirt of all descriptions accumulates in and around them. They are never flushed and sometimes become most offensive.

What month was the list of gratuitous relief made out?—I suppose not till about the end of February.

When did gratuitous relief begin?—It actually began before these lists were ready.

Did the people begin to clamour for relief directly the lists were made out?—They clamoured for relief both before and after.

Were they ever kept back by any feeling of shame?—No.

You are referring to the lower class?—Yes, and some of the middle class people.

How did you decide when to begin gratuitous relief?—It was only possible to judge by the actual appearance of the people. That was where the difficulty arose.

Was the class that first came those who were always on charity?—The difficulty was to tell when they ceased to be fed by the maliks.

(Mr. Holderness.)—Did that stoppage vary from village to village?—I think so.

(President.)—When the dry dole was given the mothers brought their children, I suppose?—Yes, and when kitchens were started the children were taken there.

Was there more than one kitchen in a circle?—No.

Were these kitchens close by the circle head-quarters?—Yes, immediately under the Circle Officer.

How far had the children to go?—About 2½ miles at the furthest; in some cases they remained in sheds half way.

Without their mothers?—Sometimes.

You say it was difficult to draw the line and to know to whom to give and to whom to refuse relief among that very large class of persons who never have any means of subsistence other than the charity of their neighbours. Do you mean to say that some of the people depending entirely upon charity would be refused relief?—Yes, especially in the early stages. There is an enormous population in Behar who always live on charity.

Can you explain what sort of cases would be refused?—When they were being fed by the more well-to-do among their fellow villagers.

Would you refuse a man if he received something from them?—Generally.

Can you tell what the amount of food given to a child in a kitchen was?—The exact amount prescribed in the Code, see section 122.

(Dr. Richardson.)—Had the children before admittance to the kitchen fallen off?—Yes. I noticed they became reduced before we started kitchens. They fell off more than the mothers did.

Kitchens would be absolutely essential?—Yes, so far as the children were concerned.

(President.)—Would you not expect that the mothers would not fall off to the same extent. A young child would go down much more rapidly?—It is quite possible.

(Mr. Holderness.)—Were your works Civil Agency or Public Works?—About ¾ Civil Agency.

Would you prefer all the works under the Department of Public Works?—I don't think it makes much difference. It would have lessened the work on Civil Works. It would have given more time for organisation of gratuitous relief.

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Did you find it difficult to organise the works?—Yes, they wanted constant inspection.

Did you get men who knew something about public works?—No. As a rule we trained the men ourselves.

Did you get a fair task out of the people?—I think so.

After the famine commenced scales of tasks were started; did you stick to them?—Yes.

And got that much work?—I think on the whole we got about that much. We gave a penal and minimum wage.

When did you give the minimum and when the penal?—It differed at different times of the famine: as a rule we gave the minimum wage when the work done was slightly deficient, and the penal when deficient by more than one-third. I think it would have been more effective to turn the men straight off the works.

(*Mr. Bourdillon.*)—Was that done to any extent?—To a small extent.

(*Mr. Holderness.*)—Who did it?—It was only done under the special orders of the Charge Superintendent or Circle Officer. As a rule the officers in charge were not given the power.

When these people were turned off what happened to them?—They were warned off for a week and then allowed to return after that time.

They had the alternative of going to another work?—Yes.

Taking the wage and task, do you think the test was a fair one of necessity?—I think so, on the whole.

How do you think it would have been possible to reduce expenses?—If the task had been kept up still higher and by the kitchen test.

As to kitchens, would you substitute kitchens for village relief?—I don't think it would be possible to do that entirely.

Would you begin by gratuitous relief or kitchens?—Kitchens first.

At the head-quarters of each circle?—Yes.

Then along with opening of kitchens would you set to work to prepare your gratuitous relief lists?—Yes.

Would you use these kitchens as a test for putting people on to gratuitous relief lists?—Up to a certain period and again at the end of the famine, but I would leave it to the discretion of the officers.

You would not insist on certain classes going to kitchens?—No, not in the case of the more respectable people.

The whole thing would require to be worked on discretion?—Yes.

You could not work it in a mechanical way?—No.

Village relief started later in your district than in other districts?—About the same time I think, but did not rise so high at first.

What was the reason of that?—There was a tendency to be severe.

Who prepared the first lists?—Chowkidars and Panches.

Who checked them?—Circle Officers.

What was the general result of such examination?—It was found that the original lists were quite worthless. A large number who did not require relief were put on the original lists.

To what extent did you yourself check the lists?—I checked exceptional cases only.

Gradually you yourself saw a fair number?—Yes.

Were the lists fairly right afterwards?—Yes. They got better and better later on.

When you left in June what percentage did your gratuitous relief lists represent?—I am afraid I cannot answer that. I forget.

In the North-Western Provinces the rule laid down by the Lieutenant-Governor is that in a distressed district 3 per cent. should be the working standard?—As a working standard I do not think it would be of any great use.

Were there any starvation deaths?—No. I heard of one or two deaths that might be indirectly attributed to privation at the beginning of the famine.

Did you come across people wandering about?—No. There were a few from the North-Western Provinces.

How many poor-houses had you?—Four.

Were there many people in them?—Very few.

What class?—Quite the very lowest, the professional beggar class. At the beginning of the famine that test was laid down, but it was found to be too severe.

As to works, do you think you had sufficient large public works or would you prefer more large works?—I think we had sufficient.

How many were there?—I think 25 works—almost entirely roads.

Why not tanks?—At the beginning they clamoured for tanks. Tanks did not afford such a good test as roads.

Did the people live much on road works?—Practically never.

In the neighbouring villages?—In some cases, but that was quite exceptional. As a rule they went home.

Is there any point of procedure in which you would suggest an alteration if you had to work the famine again?—Instead of penal and minimum wage I should turn the men off the works far more freely.

What do you think of Mr. Blackwood's system, i.e., paying a man in proportion to the work done?—I have never actually tried it. I should have been inclined to think that it would confuse the day's accounts.

Did you try piece-work?—It was tried for a short time.

You have not had sufficient experience to say whether you prefer to start with piece-work?—No.

(*Mr. Bose.*)—After a person was put on the penal wage, would he after a day or two begin to do the task-work and earn the standard wage, or would he be content with the penal wage?—It was found that people would go on taking the penal wage for a long time: probably that was when they had some reserve at home.

Mr. E. V. LEVINGE, Magistrate and Collector of Murshidabad, called in and examined.

Mr. E. V. Levinge.
3rd Feb.
1898.

I put in a written statement of evidence.

My experience of famine work is confined to the relief operations in the Murshidabad district in 1897, and it was only to a slight extent that these operations were regulated by the provisions of the Famine Code. There was never actual famine in the district, but only severe distress, affecting, roughly speaking, an area of 200 square miles with a population of 120,000. Test-works were not opened until the end of February 1897, and were not converted into regular relief works under the Code until the beginning of April. In May, under the orders of Government, the modified system of piece-work was substituted for the task-work provided by the Code, and this system was continued until the conclusion of relief operations at the end of August. The piece-work system finds no place in the Code. Only small works were undertaken, and no relief works were carried out under the supervision of the Public Works Department.

The total cost of these works was Rs 68,000, inclusive of establishment charges. It was never found necessary to open kitchens or poor-houses, no non-working dependants were relieved on the works, and the cost of gratuitous relief was met entirely from funds raised by subscription within the district. The total amount thus spent in gratuitous relief was about Rs 45,000; and although the principles of Chapter V of the Famine Code were followed, as far as possible, in administering this relief, as no part of the cost fell on Government, there was no necessity to closely observe the provisions of the Code. Private charity has always played a conspicuous part in the relief of distress in this district, and probably not less than 1½ lakhs of rupees were spent by zamindars in the affected area during the period of distress in the digging of tanks, the grant of gratuitous relief and in the sale, at a cheap rate, of rice purchased earlier, in the season when prices were low. But for this, Government

relief on a far more extensive scale would have been necessary. As it was, the numbers on Government relief never exceeded 6,000, and this was also about the maximum number relieved gratuitously at any one time through private or official agency from the District Charitable Relief Fund. It will thus be seen that, with the exception of the work on the Government relief works in March and April, no relief was administered strictly in accordance with the provisions of the Code. It is unnecessary, therefore, for me to note at any length on the points referred to in paragraph 4 of Mr. McIntosh's letter No. 42 of the 12th January 1898. I take these points in order:—

(a) *Departures from the prescriptions of the Famine Code during the recent famine.*

(i) The provision in section 43A of the Code that money doles should only be given under the most exceptional circumstances was not strictly followed. I found that recipients of relief could often make money go a longer way in the purchase of food than the relief officers. In times of scarcity people eat less rice and more of other and cheaper kinds of food, if procurable, such as *pulwals*, melons, *sags*, sweet potatoes, *kulai*, etc. The supply of these was fairly plentiful in Murshidabad last year, and the price as compared with rice was low. I frequently gave recipients of relief the option of taking it in money, and many availed themselves of this permission. This was not a general rule; but where distress is not very great and the numbers to be relieved are comparatively few, relief officers should, I think, be allowed a discretion in the matter.

(ii) *Section 43B.*—I discouraged the giving of relief at the homes of recipients as much as possible. Zamindars, village mandals, the police and other enquiring officers at first reported that numbers of women who required relief would have to be relieved at home, as otherwise they would prefer to starve. I found that many of these women did eventually come to the relief centres, and take their weekly doles when they found that relief in any other form was refused to them. The relief of women at their homes was, and I think should be, the exception rather than the rule.

(iii) *Section 62 of the Code.*—The elaborate classification of workers prescribed by this section is unsuited to conditions such as prevailed in Murshidabad in 1897. Before the introduction of the piece-work system I had only two classes on the works, viz., able-bodied (classes A, B, and C) and weakly (class D). This is sufficient where famine is not severe. As famine deepens, further sub-division might be desirable; but I have had no experience of this. The classification proposed by Mr. Higham is preferable.

(iv) For test-works the test must be severe in order to be real. I allowed a maximum of 1½ annas for an able-bodied labourer when rice was selling at 8 seers the rupee, the task being from 66 to 80 cubic feet of earth-work with a lead of 50 feet and a lift of 5 feet. When the test-works were converted into regular relief works and prices were rising, I increased the maximum wage to 1 anna 7 pies. This is considerably below the wage allowed by the Code. Generally, it seems to me that these wages are too liberal, but I have had very little experience on this point, the Government having ordered the substitution of piece for task-work at an early period of relief operations. The standard of 2½ lbs. (i.e., about 20 chattaks) in section 104 seems to be too high for Lower Bengal.

(v) The introduction of the piece-work system in May by order of Government was a departure from the Code. It is, in my opinion, the most suitable system where famine is not severe, and it should find a place in future Codes. The minimum rate of ₹1-12 per 1,000 cubic feet of earth-work mentioned in Bengal Government Resolution No. 181T. R.—Fam., dated the 6th May 1897, in which the introduction of the system in certain districts was ordered, I found too high. I reduced it to ₹1-9 per 1,000 cubic feet for medium soil. The average earnings of labourers even at these rates amounted to nearly 3½ annas a day, and able-bodied professional labourers working all day would earn as much as 5 annas. This is the chief objection to the system, for if the rates be fixed so as to prevent an able-bodied labourer from earning an unduly large amount, they would be prohibitive in the case of non-professional labourers and weakly persons for whom relief is especially required. Some measures should be devised for restricting the earnings of such able-bodied labourers as are found after enquiry to be earning more than their requirements. No non-working dependants should in any case be allowed on the works, and no Sunday wage should be given.

(b) *Degree of success which attended the measures adopted with regard to (1) the saving of human life and (2) to economy.*

(i) I have not much to remark on this point. There were no deaths from starvation in the district, some cases that were reported in the Calcutta newspapers having been found on enquiry to be false. The cost of earth-work on the relief works (including excavation or re-excavation of six tanks) worked out to ₹1-12 per 1,000 cubic feet, inclusive of turfing and dressing. The contract rates in Murshidabad vary from ₹1-14 to ₹2-8 for ordinary earth-work, and from ₹2 to ₹4-8 for tanks.

(ii) Rupees 40,000 were granted as loans to needy raiyats under the Agriculturists' Loans Act for the purchase of seed, and ₹17,000 (without interest) under the Land Improvement Loans Act to persons of good position for the excavation or re-excavation of tanks. The latter class of loans are specially useful at the commencement of distress, particularly in a district like Murshidabad, where scarcity of water is an ever recurring danger. A daily average of about 1,500 persons were continuously employed on these tanks from the middle of April till the middle of June, and these must otherwise have come on to the Government relief works.

(iii) As regards gratuitous relief, the test of work was most strictly applied. The preliminary lists prepared of persons requiring gratuitous relief in the five circles where distress was greatest contained 13,000 names, but not half this number were at any time actually relieved; and this reduction was affected solely by refusing to allow relief to any one who could work save in return for work of some kind. No doubt this is only possible where the number to be relieved is comparatively small, but the test of work is specially necessary where, as in Murshidabad, the distress never amounted to severe famine.

Over ₹13,000 were obtained from the sale of products worked up by those in receipt of relief. Of the particular kinds of work to be adopted, circumstances will doubtless vary in different districts. In Murshidabad the twisting of jute into string and the spinning and weaving of *matka* (coarse silk) were most successful. The objection to the former is the cost of the raw material and the difficulty of disposing of large quantities of string, frequently very badly made. *Matka* spinning and weaving is peculiar to Murshidabad, which is a silk-producing district. The following extract from my final report on the district famine relief operations will show what was done in this connection:—

“The relief of spinners and weavers of coarse silk is a special feature of the Committee's operations. These are among the poorest of the population of the district, and even as early as November last the probability of great distress amongst them was specially brought to my notice. The coarse silks, called *matkas*, are worn chiefly in the Mahratta country; but owing to the prevalence of the plague in the Bombay Presidency, the *matka*-weaving industry suffered an almost total collapse. As these weavers are not cultivators and have no other means of livelihood, the distress among them was very great. The Committee gave employment to 150 families of weavers (consisting of about 700 persons), and through them, directly and indirectly, to 1,200 spinners. To Mr. Mukerjee is due the credit of the success of these operations. He induced the weavers to weave coarse silks in imitation of Assam silk, and these have been readily bought up both locally and in Calcutta.”

(c) *Advice as to measures likely to prove effective, and (d) other recommendations likely to be useful in future famines.*

In addition to what I have stated above, I have only the following suggestions to make:—

(i) The area of each circle should be as small as possible. In Murshidabad the area was from 35 to 40 square miles, but this was found to be too large. The area should not exceed 25 to 30 square miles, so that the relief centre may be accessible to every one in receipt of relief. Moreover, the smaller the circle, the greater likelihood there will be of the Circle Officer really checking his gratuitous lists.

(ii) There should be a reserve of relief officers in the district or division ready for famine work whenever they may be required, and they should have some sort of preliminary training. In Murshidabad, when a new circle was to be opened, the Commissioner was asked to send a Circle Officer. Usually a mere school-boy arrived whose only qualification was that he was a plucked B. A. candidate. One of my Circle Officers, alarmed at the threats directed

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against him by the people round who wanted relief to be lavishly given, resigned within a fortnight of his appointment. Another bolted within a few days of his joining, and I never heard of him again. In the meanwhile work must become more or less disorganized, especially if the numbers on relief are large. The number of relief officers likely to be required in a district can be roughly estimated some months beforehand. A certain proportion of these may be expected to resign, break down, or to be found incompetent, and there should be a reserve of men who have undergone some sort of training to fill vacancies as they occur. It would not be difficult to form training schools at an early period of relief operations for the purpose. It would, of course, add to the cost of establishment, but I believe it would lead to a saving in the long run, and it would certainly make work more efficient. Care should be taken to select only the best candidates for appointment as Circle Officers, and they should be made to furnish security.

(President.)—You are a member of the Indian Civil Service?—Yes.

Where were you employed during the famine?—At Murshidabad, as Collector.

Were you there all through the famine?—Yes.

You say in your written statement that there was severe distress affecting, roughly speaking, an area of 200 square miles. Why was that area affected?—There was a partial failure of crops in 1895 and 1896. The short rainfall of 1896 led to a still greater failure in 1897. There were also no floods this year on which the winter rice in the *Kalantar*, a portion of the affected area, depends.

Do you depend upon the floods for sowing or ripening?—For ripening.

You say in your written statement that under the orders of Government the modified system of piece-work was substituted for the task-work provided by the Code?—Yes, it was in certain districts including Murshidabad.

Apparently from your statement gratuitous relief stopped at the end of July?—It continued on a reduced scale till the end of August.

You say that private charity has always played a conspicuous part in the relief of distress, and that probably not less than 1½ lakhs of rupees were spent by zamindars. Was any discrimination used?—Not much. But a very large number of beggars were relieved, and many who would otherwise have looked to Government for relief.

Do you think the labourer who earned, say, from 3½ annas to 5 annas wages on piece-work had many dependants, women and children?—Some, no doubt, had, while others had only a few. The Circle Officers were instructed to make lists of the dependants of the relief workers as far as possible, so as to prevent their getting gratuitous relief.

Are the spinners and weavers in ordinary times in any distress?—They are the poorest class in the district. I think there are only about 400 families of them in the whole district.

(Mr. Bourdillon.)—You say in your written statement (a) (v) that you found the minimum rate fixed in Bengal Government Resolution No. 181 T. R., dated 6th May 1897, was too high, and that you reduced it to Rs. 1.9 per 1,000 cubic feet for medium soil. Did you satisfy yourself about measurements?—As far as possible.

RAI BAHADUR NANDA GOPAL BANERJEE, District Engineer, Manbhum, called in and examined.

I put in a written statement of evidence.

Rai
Bahadur
Nanda
Gopal
Banerjee.
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Paragraph 3—(1) Classification of relief workers.—The classification of labourers in the existing Famine Code is very complicated, and it is difficult to strictly follow it into practice, especially as it is based on the assumption that the officer who makes the initial classification has a knowledge of the antecedents of the workers, as regards their capacity for any particular kind of work, which, however, excepting in special cases, he cannot be expected to possess. The simpler the classification the easier it is to reduce it into practice. Mr. Higham classifies the relief workers into four classes—"Special," "Diggers," "Carriers" and "Children." This is practically classifying the workers only as adults and children, and the works as "Special," "Digging" and "Carrying." This is very simple, and, so far as I can judge, promises to be a satisfactory arrangement.

On road works?—Yes. I myself, the District Engineer and the Charge Superintendent used to check measurements. The ordinary average earnings were about 3 or 3½ annas. Able-bodied labourers would work all day, taking their food with them to the works.

(Mr. Higham.)—What was the proportion of women to men on the piece-work system?—There were very few women.

(Mr. Bose.)—Could the difficulty pointed out in paragraph (a) (v) of your note be got over by fixing a maximum wage beyond which a piece-worker would not be able to earn?—Yes, perhaps.

(Mr. Holderness.)—Was your distressed tract contiguous with the distressed tract of Nadia?—Yes, I suppose for about 50 miles.

Are the circumstances of the distressed tracts of the two districts the same?—It is difficult to say, as I do not know Nadia. The circumstances of the *Kalantar*, which is in both districts and in which there was distress, are, I should think, very similar.

What is the main crop?—The winter rice.

I suppose that ripens in the early part of December?—Yes.

What is the population of that part, Hindus or Mahomedans?—Mostly Mahomedans.

Did you have Mahomedan women on relief works?—A few.

Was the fact that relief works did not fill in a district a certain test that there was no distress?—I think it was an indication that there was no very great distress.

You would not have thought that in the particular circumstances there might be a necessity for gratuitous relief?—I should not say so. I should insist on the test of work.

Was the work that the women did on gratuitous relief profitable?—It was not exactly profitable, but we got a very satisfactory return for the work done. No Government funds were expended in this form of relief.

Did you insist on the women doing something?—Yes, at the earlier stages.

Where did they do it?—Mostly at their homes.

Did you give a dole?—Yes.

Did you make it a condition that they would have to do a certain amount of work before they got relief?—Yes, as a rule we tried to be as strict as possible, but did not follow precise rules.

Do you think that helped to restrict the people coming to gratuitous relief?—Yes.

Was it worked by Local Committees or through Circle Officers?—Chiefly by the Circle Officers in the most affected parts. Elsewhere by voluntary agency.

Did your grain-supply ever run short?—It never ran short. Burma rice was selling in June and July.

Was there any apprehension that stocks would run short?—There was at first, but it proved to be unfounded.

You did not interfere in any way?—No. I left it entirely to private trade.

Was there any pressure on banias to import?—No, none.

Were there any kitchens?—No, distress was never severe enough for that.

Had you any poor-houses?—No.

(2) Wages.—The wages to be allowed are bound to vary according to local circumstances and general habits of the majority of the people who attend the works. The landless class of people, and the poorest class of cultivators in this district, are always in the habit of supplementing their stock of food-grains with various kinds of bulbs, roots, herbs and flowers (specially mahua) which grow spontaneously, and as such the allowance of grains in the Code seems to be high. Taking the classification recommended by Mr. Higham, I think the following scale is enough so far as Manbhum is concerned:—

Class		Ch.	Oz.
I (a)	.	17	34
II (y)	.	15	30
III (s)	.	13	26
and adult dependants, and children not being infants in arms		8	16

(3) The classification of labourers being modified as above, there ought not to be any distinction between the wages of "males" and "females", as under each class they will do the same kind and quantity of work. Moreover, the quantity of food required for maintaining an adult male or female in healthy condition being the same, no such distinction ought to exist. In these circumstances, Mr. Higham's recommendations on this point may be accepted. As regards the limit of age between "adults" and "children," it does not appear to be fair to reckon children above 12 only as adults, first, because they are not likely to be able to do the same amount of work under any class, and, secondly, because they will not require the same quantity of food for their maintenance as adults. The age limit, therefore, irrespective of sex, may be raised to 14 years.

(4) It is most important to carefully fix the standard for task for both classes I and II. The former depends only upon the nature of the soil and the latter on "lead" and "lift," but it seems that in determining the former the season of the year and antecedents of the workers ought not to be lost sight of. The classification of the workers being as above, it may be supposed that none but professional diggers will come under class I; but, from what has been generally seen during the late relief works in Manbhūm, their number was a small proportion of the total number of workers. The difficulty is to fix a task which may not be too light or attractive for such professional diggers, or too heavy for those who are not accustomed to this kind of work. This can only be obviated by those two sets of people being organized in separate gangs and having different tasks assigned for each. This will keep the professional diggers away from the relief works, unless they are driven to it by real distress or absence of employment elsewhere. The results in this respect of the late relief operations will, it is hoped, give sufficient data to determine a fair standard.

(5) *Sunday wages.*—Sunday wages should, I think, be invariably allowed on all relief works conducted under the "task-work system," as the daily wage allowed is supposed to be the cash equivalent of the value of the day's meal and does not leave any margin. The system of closing all works on Sunday is a very healthy one for all concerned and should not be altered. In the circumstances, in works conducted under the task-work system, calculated wages should be either raised by $\frac{1}{4}$ th of the day's allowance or Sunday wages allowed. To allow the workers to earn extra wages pre-supposes that the task imposed is less than the quantity which the workers can do and, moreover, converts the system into a modified form of "piece-work."

(6) This proposal also pre-supposes that the task of the diggers is really less than what they can do or ought to do, but it has got this advantage, that by allowing the diggers to earn extra wages a nearer approximation to the full amount of task may be obtained from the carriers. In such a case, it is worth considering whether the surplus number of carriers may not be converted into a separate gang altogether and allowed to do as much digging and carrying as it can, or drafted to some other kind of light work (breaking clods, dressing, etc.), instead of allowing it to hang on the limited number of available diggers, and thereby reducing the calculated task of all the carriers, as that is always likely to have a demoralising effect.

Paragraph 4.—The question of introducing the "piece-work system" in preference to the "task-work system" in all relief works is a very important one and requires careful consideration. The subject has been dealt with at length in all its bearings in paragraphs 21 to 24 and 37 of Mr. Higham's report. In Manbhūm during the late scarcity the "piece-work system" was in force from the beginning to the end and seems to have worked satisfactorily. It is true that task-work, or daily labour of some kind cannot altogether be avoided, and may have to be introduced in certain stages of the operations, but it seems to be a better and by far the simpler arrangement to introduce the "piece-work system" and keep it so long as special circumstances do not call for a change.

Paragraph 5.—Large and small works have both their advantages and disadvantages, and they have been generally dealt with in Chapter VI of my final Famine Report. Large works of undoubted public utility are certainly the best forms of relief works. It is quite true that there is a general disinclination to go to distant places for employment, because the people are habitually unenterprising, and because in times of distress there is a natural desire on the part of all the members of a family to keep together so long as that is not impracticable. As such, these works are very good tests of real distress. The class of works which should

be undertaken as relief measures, however, very much depends upon the requirements of each locality, and it is not always easy to correctly gauge the extent or intensity of the distress, which may gradually develop itself in that locality. In these circumstances, all district programmes should always include a number of small works, chiefly tanks and village roads, which should be started as test-works in the early stage of a famine. So far as Manbhūm is concerned, there is ample room yet for local improvements of a permanent nature by such works.

Paragraph 6.—It is certainly desirable that, when once a work is determined and opened as a relief measure, the officers of the Public Works Department should have a free hand in all matters of detail in connection with the management and execution of the work, but the initiation and closing of all such works should always rest with the Civil officers. The only point in which, under provisions of sections 21 and 22 of the existing Famine Code, and para. 130 of Famine Commission's Report the opinions of Departmental officers clash with those of the Civil officers, is that of fixing tasks and wages. As a matter of fact, these, as a general rule, will be fixed in the Famine Code, and if local circumstances require any modifications, the Civil officers, who are supposed to have a more intimate knowledge of the habits and general condition of the people than the Departmental officers can be expected to possess, should have the controlling voice. In these circumstances, I do not see any necessity for altering and modifying sections 21 and 22 of the Famine Code.

Paragraph 7.—It is very desirable to utilize the experience gained in the late famine on improving the system of accounts. It admits of simplifications, but this question should be considered by a Committee of experts.

Letter No. 42, dated the 12th January, from the Secretary to the Indian Famine Commission, to the address of the Secretary to the Government of Bengal, Revenue Department.

Paragraph 4 (a).—In Manbhūm the instructions of the Bengal Famine Code were departed from in various matters as detailed below:—

I. In the organisation of the staff for the execution and supervision of relief operations. There were three classes of officers—the "Circle Officers," the "Officers in Charge," and the "Charge Superintendents." The duties of the "Circle Officers," though generally the same as detailed in the Code, differed materially in several points. He had generally not much to do in respect of clauses (a) to (e) of section 31 of the Code, whereas he had to enquire into applications for loans under the Land Improvement Loans Act; to measure works done by private persons out of the loans given by Government; to enquire into and prepare a register of persons who, from respectability or social prejudice, will not come to centres of gratuitous relief, but who may be relieved by spinning, weaving, or from the Indian Charitable Famine Relief Fund; to inspect and test measurements of works under overseers or sub-overseers (Officers in Charge); and to enquire into complaints by the workers. The "Officers in Charge," referred to above, were subordinates of an inferior rank to what is apparently contemplated in the Code. They were generally sub-overseers or overseers, and their charges consisted of about 10 to 16 miles of road, or a similar length of road and one or two tanks situated near the road. Their duties differed materially from what are enumerated in section 59 of the Code. The "Charge Superintendents" were officers not contemplated in the Code. A printed note (No. 1), describing in detail the duties of these officers and other subordinate staff, is enclosed.

II. The execution of work by the "piece-work system" instead of the "task-work system" as is provided in section 52 of the Code.

III. Payments for works by special pay clerks or commission agents and not by the "Officers in Charge."

IV. Distribution of gratuitous relief at first by thannd officers, and latterly also by local committees organised under orders of the District Officer.

V. Non-prohibition of works on Sundays as regards workers, though the staff had rest on that day.

VI. Section 54 of the Code seems to contemplate that Imperial and Provincial funds should be spent only on "large projects, such as railways, canals, etc., especially sanctioned," and that such works should be carried out by the Public Works Department. In Manbhūm, Provincial funds were spent on small works by the District Officers through the District Engineer and his subordinate staff.

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(6) I. The measures introduced for execution and supervision of the relief operations worked generally satisfactorily, but it is unsafe to say how far these arrangements were economical or otherwise without comparing the expenditure incurred under this head in other localities similarly circumstanced, especially with regard to the area affected and the extent of the distress. Excluding the permanent staff under Government and the District Road Committee employed on famine duty, the total expenditure under this head in Manbhūm was Rs. 38,698-10-2, and the details given below will, I think, compare favourably with similar charges in other districts, in which the Code rules were strictly followed:—

(1) Amount spent on—

	R.	a.	p.
Gratuitous relief	69,830	13	6½
Relief works	1,39,037	6	8
Total	2,08,918	4	2½

- (2) Total area affected 3,373 sq. miles.
 (3) Total population affected 991,097
 (4) Aggregate number of persons relieved—

	R.	a.	p.
Gratuitous relief	1,456	105	
Works	1,311	569	
Total	2,767	674	

- (5) Total expenditure on establishment, excluding permanent Government officers and staff under Local District Road Committee *38,698 10 2
 (6) Average cost of (5) per square mile of affected area 11 2 8
 (7) Average cost of (5) per head of number relieved 0 0 2-68
 (8) Percentage of (5) on (1) 18 8 4

II. The "piece-work system" worked very satisfactorily, especially as the majority of the people who attended the works were more or less accustomed to the kind of work which they had to do. So far as relief of distress was concerned, the system seems to have worked very satisfactorily. The works were open to all and near their homes, and any one who wanted employment and was willing to help himself could resort to them without any difficulty. This may have brought in a number of people who might not have come to the works if the "task-work system" contemplated in the Code were enforced; but on the other hand the conditions under which the works were executed made it very easy for a considerable number of people (chiefly females), who from social prejudices would not publicly register their names, to come out after sunset, execute whatever work they could till a late hour in the night, and receive payment next morning through the male members of the family in whose name the work was measured. Such people it is very probable could not, under the task-work system, have received any relief from the works. The rates allowed were always governed by the rules laid down in Mr. Glass's tables, and were generally below the piece-work rates in ordinary years. As such, they cannot be said to have been attractive. The "task-work system" was nowhere introduced in the district, and it is difficult to state whether the system under which the works were executed in Manbhūm were economical; but from the almost entire absence of "dependants of the workers" on gratuitous relief, it may be safely inferred that the system in force was certainly not more expensive to the State, and probably was more economical than the "task-work system," the State undertaking the maintenance of the "dependants."

III. Payments were made daily, and this is a very desirable and healthy arrangement, especially when dealing with people generally more or less improvident, and a large proportion of whom are accustomed to intoxicants when they have the means and opportunities for them. Payments again were made by a class of subordinates different from those whose duty it was to measure works and register attendance. It is doubtful whether this was at all an expensive arrangement, but for obvious reasons the system introduced made such an arrangement necessary and expedient. Lastly, payments were made by paid "pay clerks" and "commission agents." The latter were introduced when eligible pay clerks were not available. These "commission agents" were the local petty contractors. Their

duty was to finance the work from week to week and supervise its execution under instructions of the "Officer in Charge." To compensate them for their trouble, for the staff they had to entertain, and for other expenses they had to incur for the performance of their duties, they were paid a commission at a fixed rate on the total amount they disbursed. The result proves that on the whole this was the cheaper arrangement, as the annexed statement (No. 2) will show. Moreover, this was the better arrangement of the two. There was always some difficulty in keeping the clerks in funds, which interfered with the regularity of the payment. The commission agents, however, made their own arrangements, and unavoidable delays in settling their weekly accounts did not in any way affect the payments they had to make.

IV. The distribution of gratuitous relief by local committees was a fairly successful and at the same time an economical arrangement. Such committees, however, were always inclined to be generally liberal in selecting suitable recipients of charity, and as such had to be carefully looked after. Some of them indeed displayed a praise-worthy devotion to their duties, and they were amenable to reason and discipline. The expediency of requiring the thana officers to perform this duty is of a very doubtful nature. There is generally an abnormal increase of crime in times of distress, and these officers have often to leave such works in the hands of their subordinates for attending to their legitimate duties; and the efficiency of such an arrangement, both as regards relief of distress and economy, must always be of a doubtful nature.

V. The system which governed the execution of relief works in Manbhūm did not admit of Sunday wages being paid, and as such it was necessary to leave the option of working on a Sunday entirely to the workers themselves, though as a rule the staff were allowed to rest on that day. This must have been a successful arrangement, so far as alleviation of distress was concerned, and could not have been more expensive to the State than the system under which the Sunday wages were allowed. As a matter of fact, attendance on Sundays was rather the exception than the rule, which showed that it was only the very needy who came to work on those days.

VI. This may or may not be a departure from the Code rules. From the wording of section 54, it seems that there has been a departure in spending Provincial funds on small works, and in not spending such funds through the agency of the Public Works Department. If it be a departure at all, it has been both successful and economical.

(c) (d) My personal knowledge and experience are altogether confined to Manbhūm especially, and Chota Nagpur generally. I regret I have not had time to properly study the systems followed in the other districts of Chota Nagpur, though I believe that, with slight differences in minor matters of details, they were much the same as in Manbhūm. Under the circumstances, and in the absence of any personal experience of other systems of works in other localities, I cannot help feeling an amount of diffidence in offering any "advice as to the measures and methods of working which seem likely to prove most effective in future." So far as I am able to judge, I would suggest the following modifications:—

(1) To alter the rules in such a way as to make it competent for the District Officer to organise his own famine staff, according to requirements and local circumstances within reasonable limits.

(2) To substitute "piece-work" for "task-work" as a rule and authorize the District Officer to make his own choice of the systems, according to local circumstances.

(3) To authorize the District Officer to organize local committees in centres in which that may be conveniently done, and as a rule to distribute gratuitous relief through such committees, under proper supervision, or through separate paid agents, but not through the police.

(4) To simplify classification of workers on the lines suggested in Mr. Higham's report.

(5) To restrict distribution of gratuitous relief within narrow limits, and to open kitchens (especially for children and the class of people described in section 42 of the Code) in larger numbers than was done during the late scarcity.

(6) Making adequate provision for the relief of artisans of different classes (especially carpenters, masons, cobblers, braziers, &c.), who cannot be employed on relief works.

* This includes pay and allowances of three Sub-Deputy Collectors who acted as Charge Superintendents.

(7) To provide for granting small loans, on moderate interest (not exceeding 6 per cent. per annum), to respectable persons in distress in areas officially declared as "famine-stricken," on sufficient security for recovery of principal and interest within a reasonable period.

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No. 2.

Statement showing comparative cost of establishment charges.

Number of circle.	EXPENDITURE ON WORKS—		Total amount of commission.	Total amount spent on paying staff.	Percentage of 3 on 2 (a).	Percentage of 4 on 2 (b).	REMARKS.
	Through commission agents.	Through paid agents.					
1	2a	2b	3	4	5	6	7
No. I . . .	R a. p. 8,700 12 9½	R a. p. 3,915 10 6	R a. p. 913 8 4	R a. p. 403 0 11	10.50	10.29	The figures for the whole district are exclusive of the works under Mr. Campbell. The total expenditure on the works under Mr. Campbell amounted to R27,613-3-3, and the total establishment charges to R1,101-14, which is about 4 per cent. on the amount spent.
" II . . .	3,871 13 1	2,178 9 3	415 4 0	561 15 8	10.72	25.79	
" III . . .	16,174 3 7	4,089 0 8	1,753 5 1	193 12 2	10.84	4.73	
" VII . . .	7,791 12 8	1,935 10 3	779 2 9	169 0 0	10.00	8.74	
" VIII . . .	8,063 1 11	1,857 6 1½	840 4 3	357 11 4	10.42	19.26	
Total . . .	44,601 12 0½	13,976 4 9½	4,701 8 5	1,685 8 1	10.54	12.04	
Whole district . . .	1,00,402 14 9½	13,976 4 9½	10,402 6 9	1,685 8 1	10.35	12.04	

(President.)—You are District Engineer, Manbhūm?—Yes.

Have you been there long?—Over 18 years.

Is your famine experience confined to the recent famine?—Yes.

(Mr. Higham.)—You had charge of all the relief works in Manbhūm?—Yes.

What was the largest number of workers you had at one time?—16,000.

How many works were there?—50.

What sort of works?—Road works, and tank works.

All done by piece-work?—Yes.

Had you any task-work?—No.

What were the rates for piece-work?—On road works it was from R1-4-0 to R1-14-0 per thousand cubic feet.

What did they earn?—The minimum was 6 pies per male unit, the maximum 3½ annas; the average was 2½ annas.

What was the greatest amount earned by a professional labourer?—The average was 2½ annas.

Were there many professional labourers?—No, not many.

What were the commission agents you speak of?—They were local petty contractors. Their business was to finance the work. They paid the coolies according to the statement of work done.

Where did they get the money from?—They supplied it themselves and after a week they received payment from the Government Treasury.

What was the advantage in that?—We had no occasion to send them money. They also looked after the works.

What did you pay them?—12½ per cent. up to 30th June and 10 per cent. after the 1st of July.

You had no other establishment?—Sub-Overseers and Munshis.

Who took the muster?—Road or tank Munshis.

What did the commission agent do?—He saw that the coolies carried out the instructions of the officers and received payment every day.

Where did they get the money?—From the Head Quarters' Treasury.

And they would distribute it to the gangs?—Yes. They advanced money and saw that the works were properly done.

Why did not the officer in charge do that?—The length of his charge was such that he could not do so.

Who measured up the works?—The Munshis.

How often?—Every day. There were four Munshis under the Sub-Overseer and they used to do it. The Sub-Overseer used to check measurements.

How many works had the Sub-Overseer?—About 16 miles of road.

(Mr. Bourdillon.)—How were the commission agents repaid?—Bills were made in my name. They received the money from me.

You say piece-work was done satisfactorily. Were there any complaints from Mr. Campbell, a Missionary, of the lowness of rates?—Yes, there were complaints at first, but they were settled satisfactorily.

How did you settle them?—The Commissioner went and I accompanied him. We looked at the nature of the soil and calculated the rates according to Mr. Glass' tables.

(Mr. Holderness.)—Would you prefer to start piece-work from the beginning?—Yes, I would.

Would the labourers earn more money that way?—I don't think so.

If you paid low rates how would non-professionals have earned enough for themselves?—The people who come are accustomed to the work. So it is not difficult to adjust rates in Manbhūm.

In the case of a weak gang would you have special rates?—Yes, daily rates for dressing and patching.

Did you give a Sunday wage?—Yes, only to some day-labourers.

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Did they work on Sunday?—Yes, if they liked.

There was no limit to the amount a man could earn?—No.

(President.)—You say in your second paper that the piece-work system may have brought in a number of people who might not have come to the works if the task-work system contemplated in the Code were enforced. What class of people were these?—The low, poor class cultivators, small shop-keepers and local artisans.

(Dr. Richardson.)—Were the people much reduced in health?—No. We began gratuitous relief before we began works.

(Mr. Holderness.)—Are these people aborigines?—Some are.

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RAI BAHADUR KRISHNA CHANDRA BANERJEE, Executive Engineer, 2nd Calcutta Division, called in and examined.

I put in a written note of evidence.

(a)—Departures from the Prescriptions of the Bengal Famine Code which have occurred in the province during the recent Famine.

The Blackwood system, which is a limited piece-work system, combined with my system of allotting task, was adopted during the later stages of the famine operations in the late Madhubani Famine Relief Works Division. I was not in charge of any works executed under a regular piece-work system.

2. It is distinctly noted in section 55 (3) of the above Code that there should be approximately one work for each 16 square miles, and that there should not be many works open in the same tract with only a few people in each. This was, however, just what happened in the late famine in the Darbhanga district (*vide* my final report, page 18).

3. In the above Code, section 89, it is noted that only able-bodied labourers should be employed on works in charge of the Public Works Department. Under instructions from the Collector, however, all persons coming to the works for relief were taken charge of.

(b)—Degree of success which has attended the measures adopted, considered primarily with regard to the relief of distress and the saving of human life, and, secondarily, with regard to economy.

4. Paragraph 20, containing general remarks and results, of my final report (*vide* page 21) is a complete answer to this query, which may be referred to.

I would venture to add here that the success in the late famine operations was, in a great measure, due to the works being taken over and started by the Public Works Department, which brought into order the chaos that prevailed while they were solely under the Civil Agency Department, and is fully described in page 3 of my report. The latter Department, however, took great pains subsequently to model their works on the system introduced by the Public Works Department, and the results were then very satisfactory. I do not mean any imputation by this remark, but would draw attention to the fact, so that the mistake might be avoided in future famines. The reason why they failed in the first instance was want of professional experience in handling large bodies of men, and absence of a proper system for exacting an adequate task from them. It is desirable, therefore, to place the large and important works in charge of the Public Works Department from the outset.

(c)—Advice as to the measures and methods of working which seem likely to prove most effective in future.

5. During the famine operations carried out under me in the Madhubani Division last year, I devoted much attention and thought to this subject. I should think that, in the case of important projects, especially such as canals, roads, or railways, where it is desirable to concentrate a large number of relief labour, *piece-work* would be the best, provided that the percentage of men to women and children be not over 50. In the latter case, I would recommend a combination of Mr. Blackwood's system of limited piece-work and my system of exacting task by a ready reckoner specially prepared by me and described in my report, page 17, and Mr. Mills' report, pages 56, 65 and 67. Muster-rolls are not absolutely necessary, the number of

(Dr. Richardson.)—Were there any deaths from starvation?—I did not come across any.

(Mr. Holderness.)—Were the people very hard up?—The distress was not very great except in Gobindpore Sub-division.

Was there a failure of crop there?—The proportion of failure was greater there than elsewhere.

Was it chiefly rice?—Yes.

(President.)—Why do you recommend kitchens for children?—Because when grain doles were given I noticed that parents would take the doles for their children, but not give them more than enough to keep body and soul together.

What class of people were they?—Partly aborigines, also labourers, and the low class of cultivators.

coolies at work and the measurements of work done being recorded in a measurement-book introduced by me in the late famine, a description of which is given in my report, page 6. This would supply all the information needed for the preparation of the accounts, and enable the inspecting officer to check work and number of coolies employed at any stage of progress. To check the muster-rolls of all the gangs under a large charge is not an easy task, and it is doubtful if this can be completed in the course of a day, whereas by this plan the number of coolies in about 50 gangs could be checked in less than a couple of hours if that were needed. The chances of fraud would thus be greatly minimized. Payments should, of course, be made daily to those who complete their full task. Those that fail to complete their work at the end of the second day may be paid proportionate wages and their accounts closed, after which fresh task may be allotted to them. This procedure was followed in the late Madhubani Division with eminent success.

(d)—Other recommendations or opinions thought likely to be useful in case of future famines.

(6) That in future no works should be started within 5 miles of another.

(7) That a regular piece-work system should be introduced in the first stages of a famine, and if the combined system referred to under (c) or any other form of task-work be ultimately decided upon, the transition from one to the other could be easily effected. The task-work system requires a certain degree of preparation, in the shape of equipments, forms, etc., without which mismanagement must ever be the inevitable consequence.

(8) The controlling officers, such as the Superintendents, Divisional and Sub-divisional Officers, should in my opinion be vested with magisterial powers, with a view to inspire the people with fear and prevent rioting.

(President.)—You are an Executive Engineer?—Yes.

What district do you belong to?—The Darbhanga District.

Have you been there all through the famine?—Yes.

(Mr. Higham.)—You recommend piece-work being introduced?—Yes. But only when the percentage of male units is below 50.

What would you recommend when it is above 50?—I should think a limited piece-work system. The Blackwood system.

Is there any difference between the Blackwood system and the Code system?—There is a difference. A man can earn more under the Blackwood system than under the task system.

Can a man earn much more under the Blackwood system?—No.

How do you fix your limit of 50 per cent.?—I fix 50 per cent., because when there are a large number of males there must be many professional diggers.

Then when you have practically more than 50 per cent. of males you would like to have the task system without a minimum wage?—Yes, without a minimum wage.

Was there a large percentage of males on your works?—No. In case of a large percentage of males the weakly persons would, in my opinion, be driven out.

What was the percentage of males on your works?—48.

At the first stage of a famine you recommend that piece-work should be introduced?—Yes, then the distress is not very acute. Task work requires some preparation without which there is sure to be mismanagement.

I understand you recommend piece-work?—In the first stage of the famine I would recommend piece-work, whatever the proportion of men may be.

In task-work what do you think is the best way of classifying?—I should think only males, females, and children.

You make no difference between male and female carriers?—Yes, I should. I would pay male carriers more than female carriers. There are complaints if the male and female carriers are paid the same wages. There are complaints by male carriers, so I should pay male carriers more than the women.

They were paid more on the same work?—Yes.

(Mr. Holderness.)—Under the ready reckoner do the B and D males sometimes get the same wage?—They were both paid 1 anna 9 pies.

(Mr. Higham.)—Males, I think, carry more than the females?—Yes.

The number of men that carry, I suppose, was in a very small proportion?—Yes. But it happened that the diggers sometimes did the carrier's work.

But then did you give the digger's pay?—Yes.

But men who cannot dig?—My plan is quite simple. I would always pay a carrier as much as a digger, but a man more than a woman.

(Mr. Holderness.)—Whether they carried or not?—Yes.

Then they would not be classed as D labourers?—No.

You say that at first there was chaos while the works were under Civil Agency, what sort of works?—There was hardly any system at all. The men came in large numbers and no task-work was exacted. The work was in a very much mismanaged state.

When did the Public Works Department take over charge?—In February. The Public Works Department introduced a strict task system, and the numbers declined.

Did you take over all the works?—Not all the works.

Did you take over the majority of the works?—Whatever works the Collector pointed us out.

Did the Collector hand them over as your staff gradually increased?—No, he simply fixed certain dates for works to be taken over, and they were taken over on those dates.

Having taken them over you reduced the number on the works?—We took them and the result was that the numbers dwindled.

Did not the Civil Agency people also introduce a strict task system?—Yes, they did so at the same time as we did. And the result was that the numbers on their works too declined.

You think if the Public Works Department had not taken them over, there would have been no improvement on the Civil Agency works?—I should think so. The Collector could not look after all the works himself. The Civil Agency subordinates were most inexperienced, and the result was that the works suffered.

Did you inspect the Civil Agency works at all?—No.

Were you called upon to advise as regards these works?—No. The only information I got was from the Collector. He said that the numbers had been greatly reduced on Civil Agency works and that proper task was being exacted there.

You say that there were more works opened than the Code contemplated?—Yes.

When you took over the works, did you reduce the numbers at all?—We had no power to reduce the number of works.

Did you recommend reduction?—Of course we did.

Verbally?—Yes, verbally to the Superintendent.

Had it any effect?—No.

(Mr. Bourdillon.)—In what month was it that you noticed the numbers on works were falling off?—It was in March. They struck work. There were about 50,000 people who struck work. I cannot say that the reduction was on account of the harvesting of the *rabi* crop, but perhaps it was to some extent. The Collector was obliged to close some of the works, and those works were not started again for four or five months. Those works were closed because men struck work.

(Mr. Holderness.)—Did they eventually come back again?—No.

Had you any large works opened? Of what size were they?—There were about 5,000 men working on a work.

Did they come from a distance?—Yes. About four or five miles.

They would go away every night?—Yes.

You had no piece-work?—No.

And you worked in some cases on the Blackwood system?—Yes. That is a very good system.

Did you think that the amount of wage and the amount of task you exacted constituted a stringent test?—Yes.

You think people came to the works who were not in real need?—No. Eventually, no.

MR. W. H. VINCENT, Magistrate and Collector of Khulna, called in and examined.

Note in reply to the Secretary to the Indian Famine Commission's Circular No. 42, dated the 12th January 1898.

This note is simply in regard to the four points mentioned in paragraph 4 of the letter under reference, and my remarks are intended to apply solely to the circumstances of this district. The points are dealt with *seriatim* :—

(a) DEPARTURES FROM THE PRESCRIPTIONS OF THE BENGAL FAMINE CODE WHICH HAVE OCCURRED IN THE PROVINCE DURING THE RECENT FAMINE.

2. *Relief works*.—The chief departures in this district were the following as regards relief works. Instead of large works we had a number of small works, chiefly small tanks 150' x 120' or 200' x 150'. The reasons for this were that there is no need for large tanks. Roads, owing to the numerous rivers and khals, were impossible in many places. Owing to these rivers again, and the difficulties of moving about, it was advisable to have works close to the homes of workers. This was also advisable, as it avoided the necessity of camps, and left the labourers, many of whom were large jotedars, free to go home and look after their families and such cattle and standing crops or fruit trees as they had. In addition to this, drinking water was very scarce, and

there was a severe outbreak of cholera, which threatened to increase the death-rate considerably at one time in consequence of the want of drinking-water; tanks were therefore the most useful form of work, and we had as many as 30 open at a time, in addition to numbers under private owners who took loans. This is in opposition to clause 3 of paragraph 55 of the Code.

3. Secondly, we had piece-work here instead of task-work. I am not in favour of this for several reasons, the chief one being that it is in practice far more difficult to check piece-work than task-work. It proved more expensive here, and the strong earned excessive wages from a famine point of view, and the weak did not earn enough. It was the weak who needed the wage more. There were deviations from Government orders in regard to the establishment employed, but these were not, strictly speaking, deviations from the Code.

4. Thirdly, classification of workers was different. No women worked here, and there was no separation of diggers and carriers. All labourers were classed B and D. Any classification more complicated is impossible.

5. Other minor variations were the following :—

For a full task a gang was paid a full wage; for short task the whole gang got the minimum wage. We had no holiday on Sundays, but on *kāt* days, as this was more convenient for labourers; we did not pay the holiday wage to

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men unless they had worked the full week on the works, and half-a-day if they had worked half a week. We gave no person half the minimum wage on admission, as directed, in section 61 of the Code. We paid a good many men for dressing, baling, jungle-cutting and carrying brush-wood irrespective of task. This was necessary. Jungle on the line of roads had to be cut, water from tanks to be re-excavated had to be baled, and so forth. For dressing originally we also had labourers irrespective of task and only the minimum wage, but subsequently we fixed a task and gave the maximum.

6. *Gratuitous relief.*—Under the Code, gratuitous relief is only to be given to lunatics, cripples, blind persons, those from age and weakness incapable of work, and those who have to attend to the sick or children and cannot work. In this district the majority of the population are Mussalmans. As far as my experience goes and from what I have learned, their women never work outside, nor do the women of the cultivating Hindu castes. In ordinary years there is no necessity for them to do so. Widows and other poor women who have to work in ordinary times earn a living by paddy-husking and similar light work. There was no demand for this work this year, and the women would not do earth-work. Consequently, a large number of them who were ascertained to be without any means of living or property, had to be given gratuitous relief. This relief was not really gratuitous, as they had to spin jute into string or husk paddy in exchange, but it was debited to this head.

7. It is clear that some such relief is intended from the wording of section 41, which says "then gratuitous relief should be given to widows, sick and children." In consequence of this the number on gratuitous relief was large in proportion to workers. It is to me clear that this will happen again in any time of distress for the following reasons. The percentage of population that actually requires relief varies from 5 per cent. to 15 per cent. in time of distress. This excludes those who are just able to live and who are on the verge of extreme want. This percentage comes from the very poorest classes. In those poorest classes one is sure to find poor widows with large families and no property, and to these some form of relief must be given; and if they will not do earth-work, they must have some form of gratuitous relief. I may add that the people in this district appear to be beyond the ordinary prolific, and at the same time to die off rapidly; when the death-rate is reported properly it is from 35 to 42 per mille.

8. Again, gratuitous relief was never given at the homes of recipients. They came to fixed centres once a week. Each circle had two centres, which were so arranged as to be within 5 or 6 miles of the homes of recipients. In two circles I had extra fortnightly centres in the extreme south of the district, in the village close to new reclamations from the Sundarbans.

9. No grain-doles were given by banias, but all by Circle Officers. In each centre I had *golas* borrowed or bought. The contractor supplied grain there (paddy). It was given out to gratuitous relief recipients, husked and returned to Circle Officers and issued to recipients, balances of *dhan* and *chaul* being stored in the *golas*. The *golas* were guarded by constables. Circle Officers kept stock accounts of these stores. This necessitated extra registers for Circle Officers.

10. *Poor-houses.*—We had finally six poor-houses here. The persons admitted came under heads 2, 3, and 4 of section 11. The rules for managing a poor-house in the Code are meagre, and it was necessary to add to them considerably. The registers kept in the poor-house were considerably more than that prescribed, and if any check is to be kept over the store of materials, these registers are necessary.

11. The rations given here were above those prescribed by

	MEN.		WOMEN		Children.	
	Code rate	Our rate.	Code rate.	Our rate.		
	1	2	3	4		5	6
	lb. oz.	lb. oz.	lb. oz.	lb. oz.		
Rice	1 0	1 2	0 14	1 0		
Pulse	0 2	0 2	0 2	0 2		
Salt	0 1	0 1	0 1	0 1		
Oil	0 1	0 1	0 1	0 1		
Vegetables	0 1	0 1	0 1	0 1		

Government. The table in the margin shows what the differences were. The excess was met from the Indian Famine

Charitable Relief Fund. In the case of women and large children our ration is more suitable. People come to a poor-

house in bad condition and in want of food. They will not stay and endure the discomfort of a poor-house without reason, even if the rations prescribed by me in this district are given. This excess also leaves a margin for punishing for offences, such as uncleanness or disobedience of orders. The staff we kept was the following:—A native doctor, who was superintendent, on R25; a sweeper on R10, and this was the difficult man to get, as there are no *mekters* here; two peons on R3 and their food; one Brahmin cook on R2 or R3 and his food. The Mussalmans' food was cooked by one of the inmates or more, if necessary. These persons got R1 in addition to the ration for this. The total staff cost R45 a month. I may note that this is far less than the cost of any establishment entertained under rule 3, Appendix VIII, of the Code would be. The arrangements in our poor-houses were different from those prescribed in the said appendix.

12. Again, in place of pulse here fish was given, which was cheaper and more what the people were used to.

13. Our poor-houses contained on an average 150 to 200 persons each: in one case only there were 300 inmates for some time. There was no hospital attached to the poor-houses, but the native doctor had a supply of medicine in accordance with a scale prescribed by the Civil Medical Officer. The inmates were also, when necessary, provided with clothes and blankets for the sick, and mats to sleep on. These were provided from the Indian Famine Charitable Relief Fund.

The chief deviations from the Code were, then, in the rations, books, staff and arrangements of the interior. The staff arrangements were, I think, so inexpensive as to deserve some attention.

14. There were four entrances to every poor-house, three being well locked. The provisions of section 115, last paragraph, are very unsafe in this matter, as the inmates in case of fire would not possibly get out by one door. This was noticed by Mr. Finucane in one poor-house, and his directions were attended to. Additional precautions taken were that in any case of death in a poor-house the Native Doctor had to hold a *post-mortem* or to certify to cause of death.

(b) DEGREE OF SUCCESS WHICH HAS ATTENDED THE MEASURES ADOPTED, CONSIDERED PRIMARILY WITH REGARD TO THE RELIEF OF DISTRESS AND THE SAVING OF HUMAN LIFE, AND SECONDARILY WITH REGARD TO ECONOMY.

15. There is no question that as regards saving of life and relief of distress, our measures were adequate. The death-rate alone proves this, and I also satisfied myself as regards it after enquiry. One death only was reported from starvation, and that was because the applicant did not come and apply for relief in time. There were of course deaths from illness, the effects of which were aggravated owing to insufficient food.

16. As regards economy, piece-work was not a success here. I have already given my reasons for disapproving of it in connection with famine relief. It is expensive and difficult to check. The strong get more than is necessary, and the weak too little.

17. There is another point in connection with gratuitous relief which deserves attention. We gave out paddy to be husked by recipients, as the Government insisted on work being done for gratuitous relief when work could be done. The task in paddy-husking was 1½ maunds. This is inadequate, a proper task being five or six maunds a week. No women could, however, remove more than 1½ maunds. There was some theft and some wastage, and the rice received back was dearer than Burma rice. Burma paddy was not imported. Carting of paddy cost money also. In the result our rice cost more than it might have, and the amount of work given was insufficient to act as a test of distress. This was pointed out to Government on several occasions.

18. Again, we gave out tasks of jute to be spun into string. It was very expensive. The jute cost R5 and R6 a maund. Five seers was a week's task, and a fair one. The value of this was 10 annas to 12 annas. The ration of the recipient was 3½ seers of rice, and cost, or would have cost if Burma rice had been bought, about 7 annas. The cost of the material issued was then greater than the ration, and the product, jute string, was not saleable. The result is that I have some 2,000 maunds of string now on my hands which is being spoiled by rats and damp, and for which I had to build special sheds. I repeatedly pointed this out to Government, but so much stress was laid on the necessity of giving gratuitous relief to recipients of work, that I was ordered to continue it. In my opinion the poor-house test is by far a better test of whether a person should get relief

or not, than any labour-test. If this alone had been used as a test or any kind of test, the workers on gratuitous relief would have been five times what they were at least. With regard to establishment, I submit our system was in the end economical. Working with insufficient men means insufficient checks on lists, and that is fatal to good work. A Circle Officer costs here as much as the relief to about 180 persons a month, and I am of opinion that an insufficiency of men does not only endanger the success of the measures in the chief object of saving life, but means the unnecessary addition of numbers to be estimated in thousands, and not in hundreds, to recipients of gratuitous relief.

(c) ADVICE AS TO THE MEASURES AND METHODS OF WORKING WHICH SEEM LIKELY TO PROVE MOST EFFECTIVE IN FUTURE IN THESE TWO RESPECTS.

19. The most important point in this connection is, in my opinion, the amendment of Chapter VIII of the Code. For Eastern Bengal districts, where gratuitous relief will have to be given more freely than elsewhere, poor-houses should not be started late, but early. They are the best test for gratuitous relief, and practically the only one that can be applied when there are a number of new applicants. Village visits are the most accurate test, but the number requiring relief varies constantly, and in some cases it is not possible to get villages revisited time after time with the speed that is necessary. When gratuitous relief is given, crowds of professional beggars at once collect and try to get relief. Some of these really need relief, others do not; but it is very difficult to ascertain speedily what is necessary. In these cases a poor-house is of great use. It enables officers to put a fair and good test at once to the applicants. "If you are really so bad, go to the poor-house." If they go, there is reason to think they are in need; if not, there is reason to think they are not. About 60 per cent. of the applicants who may appear to need relief can be got rid of in this way, and, I am convinced, with safety. When the whole village combines to push off the support of old and infirm persons on to Government, this test is of great use. Local enquiry is a slow and difficult process in such cases. I am very strongly in favour of using this as a test in the early stages of a famine. It is what has been ascertained to be correct in England, that in-door relief, if strictly insisted on, reduces rates. Similarly, in times of distress, in-door relief diminishes expenditure. Gratuitous relief is practically a form of poor-law which is only introduced in India in very pressing circumstances, where starvation of a certain proportion of the people is apprehended.

20. Other points on which I would make certain suggestions are the simplification of the classification of labourers into B and D—the necessity for this is obvious to any one who has practical experience of arranging new labourers on a work—and a reduction in the number and complex nature of returns and statements. Many are really of little use as it is. For instance, Form E or 7, which is one of the simplest, gives really no idea of value of work in the absence of details as to lift and lead. Form D is again so complicated that it takes many hours to prepare. I have personally been up late at night checking it, and the clerks every week sat up till 11 and midnight preparing it and other statements. For reasons previously given, I object to piece-work.

21. Some amendment in paragraph 42 of the Code for East Bengal is necessary, as women must in many cases receive gratuitous relief or starve.

22. The difference between the money-dole and grain-dole should be removed. The former is at present much larger than the latter. Grain-doles should be given almost always, and never money if it can be avoided. The percentage of money-doles should not be 5 per cent. of total.

23. As regards relief works, the provision of section 61 should be made optional. The working of children should be left entirely to the discretion of the District Officer. All works, whether under Public Works Department or not, should be completely under the control of the Collector. The wage paid should always be calculated in grain equivalent. The other system is difficult to work.

24. Lastly, famine programmes should be more carefully prepared, detailed estimates being prepared and sites selected and plans made beforehand, and, if possible, arrangements made with owners. There is really no great difficulty in this, and the want of detailed estimates and plans was a great trouble in the last famine: I believe in many districts these are not prepared. I have not dealt with minor points needing alteration in the Code.

(d) OTHER RECOMMENDATIONS OR OPINIONS THOUGHT LIKELY TO BE USEFUL IN CASE OF FUTURE FAMINES.

Mr. W. H. Vincent.

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25. I have no other suggestion of importance. Minor points in connection with the details of the Code need amendment in my opinion, but to mention them in full would make my note unnecessarily long and cumbrous. I also proposed to make some suggestions in regard to circle organization and size of circles and also in regard to tasks, but I think, on the whole, that in respect of these points it is advisable to leave matters very largely in the hands of the district officers, as the circumstances of different districts vary so greatly.

(President.)—You belong to the Indian Civil Service?—Yes.

Of what district did you have experience during the famine?—I was Collector of Khulna from the 29th of January 1897.

Was the distress in any particular part of the district?—It was confined to the southern part, towards the 24-Per-ganna side.

What was the cause of that?—Chiefly on account of bad rains in June, July and August for two years, and partly due to the fact that the rivers are becoming more salt.

Was it the failure of one crop?—Practically one; the *aman* crop.

Rice?—Yes, *aman* rice.

You began in January?—I took charge in January.

Who was there before you?—Mr. Phillimore. The distress was first noticed before I went there, I think in November.

Was the distress among the labouring class or among the small cultivators?—The men are all cultivators. The landless labouring class is very small indeed.

Are their holdings large?—Very large. We had jotedars holding about 200 bighas of land. As a rule, in ordinary years they are very well-to-do.

These jotedars, did they own a great number of cattle?—Some of them do. Many of the cattle were sold and many were reported to have died.

What do they generally live on?—Rice, fish and vegetables.

Fish they catch themselves?—Sometimes they catch themselves, but as a rule they are purchased.

Was fish particularly cheap during the scarcity?—Yes.

While the scarcity was going on?—Yes.

How do you account for that?—There were no buyers. There was no demand for fish and such luxuries. We got milk at about sixteen *kutcha* seers for a rupee.

Are there any weavers in that part of the country?—Yes, a few; they managed to pull through.

Were there any relief works?—Yes, they were begun before I went to the district.

Was it task-work?—We began with task-work and then had piece-work.

(Mr. Holderness.)—Piece-work was not found to be a success?—I did not like it.

Why?—The chief reason was that the strong men earned more than was necessary, and the weaker men less than what they ought to.

Did the numbers decrease after the introduction of piece-work?—I do not think they did.

You think the wage was not fairly distributed?—The average wage on task-work was much lower than the average wage on piece-work.

You said that jotedars with large holdings came on to the works: did a number of them come on?—I cannot say how many.

What did they earn on the works?—Two annas.

Is that the maximum?—Yes.

Who prepared the lists of recipients of gratuitous relief?—The Circle Officers, before distress was really very acute. Then every village was revisited by these men. Their lists were subsequently checked by myself and by the Sub-Divisional Officer, and some by others.

Mr. W. H. Vincent. Did the police send up any names?—They were no good.

3rd Feb. 1898. You found the police no good?—No; they could not discriminate.

You are in favour of poor-houses?—Yes: for Eastern Bengal.

Did you try a poor-house?—Yes: we had six poor-houses.

They would not do for all classes?—The majority of the population in Khulna is Mahomedan, who have no class prejudice.

Did you try the distribution of cooked food without residence?—No, there were many objections. The distance that the persons would have to come was a very great objection, especially with so much water communication as we have.

Had you much gratuitous relief?—Gratuitous relief in my district was never up to 35.

Then you tried to get some work done by the recipients of gratuitous relief?—I had some work done by those able to do it, but the experiment was not very successful financially. I would not attempt to get such work in a future famine.

(Dr. Richardson.)—Do you think the cooked poor-house ration sufficient?—I think it was sufficient to maintain people in a good state, that is, people who come in not reduced; but it is not enough to bring up people who come in very much reduced. I also doubt if it is sufficient for children.

You often used a poor-house as a test?—Very commonly.

(President.)—You say under the piece-work system weaker men may get too little. Were there family gangs on piece-work?—No, village gangs.

What sized gang?—They varied from 5 to 40.

Were they mainly men?—All men and children.

There were no women on the works?—No, we had no women on the works. I was unable to induce the Mahomedan women of the district to go on works. I never in ordinary times see the women working in the fields.

Do you think there were strong and weak mixed together?—If a man did not do his allotted task, I think the gang would eject him.

(Mr. Holderness.)—I see you think that Form D ought to be simplified?—If possible.

You say that piece-work was much more difficult to check than task-work?—In task-work a man went on to work and knew exactly what he would get and that there was no probability of the mohurrir paying him the maximum wages if he had not done the maximum work.

They always did the maximum task every day?—Generally.

Were there any women in the poor-houses?—Nearly all the inmates of the poor-houses were women, mostly Mahomedan women.

What classes were they?—Chiefly Mahomedans and other low classes. High classes objected very strongly to going to poor-houses.

Did you import any grain?—As long as there is grain in Calcutta there will be grain in Khulna.

You had no difficulty about that?—I had no difficulty about that except that the prices of local *kāts* were very high.

(President.)—Did you have any complaints of not being able to get any rice?—If people had money they could get it. The dealers raised their prices when the local supply was short.

Was the system of giving loans to zamindars a popular one?—Yes. There were many applications. The difficulty was that the zamindars did not apply themselves, but through their tenure-holders. We had very many applications, and we gave away Rs45,000.

What class of work did they execute?—Tanks and bunds.

At the Imperial Secretariat Building, Calcutta.

ELEVENTH DAY.

Friday, 4th February 1898.

PRESENT:

SIR J. B. LYALL, G.C.I.E., K.C.S.I. (PRESIDENT).

SURGEON-COLONEL J. RICHARDSON.

MR. T. W. HOLDBERNESS, C.S.I.

„ T. HIGHAM, C.I.E.

RAI BAHADUR B. K. BOSE, C.I.E.

MR. J. A. BOURDILLON C.S.I. (Temporary Member for Bengal).

MR. H. J. McINTOSH, Secretary.

MR. B. C. BASU, Assistant to Director of Land Records and Agriculture, Assam, called in and examined.

Mr. B. C. Basu.

4th Feb. 1898.

I put in a written statement of evidence.

I was employed as Assistant to Director of Land Records and Agriculture, Bengal, from May 1888 to September 1897, when I was transferred to Assam. During the time I was employed in Bengal, I had opportunities of visiting many parts of this Province, and made special agricultural enquiries in many districts. In the last famine I prepared, under the orders of the Director of Land Records and Agriculture, Bengal, certain statistics relating to rainfall, prices and outturn of food grains in the years 1873-74, 1888-89, 1891-92 and 1896-97, with short accounts of famine relief in past years. These were appended to the Government of Bengal's letter No. 4549 Agri., dated the 18th November 1896, to the Government of India. During the last cold weather I was deputed by Government to make special enquiries about the outturn of food crops and the material condition of the people in certain distressed areas in the Khulna, Nadia and Jessore districts. I also prepared a note on the outturn and stocks of food-grains in Bengal, based on reports received from district officers. This note was appended to the Government of Bengal's letter No. 1268 Agri. (Fam), dated the 28th June 1897, to the Government of India.

Answers to the questions put by the Famine Commission.

*1. The maximum area affected in 1896-97 was 26,498 square miles with a population of 11,501,000 souls.

2. The distress was due primarily to the early cessation of the monsoon of 1896, the evil effects of which were aggravated by short rainfall almost throughout the rainy season. In certain parts of Lower Bengal, where the winter rice crop depends chiefly on the annual floods, its failure last year was partly due to exceptionally low floods in 1896, which were the lowest on record. In the Satkhira sub-division of Khulna, the immediate cause of the failure of the winter rice crop was the injurious action of the salt with which the soil had been impregnated, and which the short rainfall of last year was insufficient to wash out.

While the failure of the winter rice crop must be held to be the primary cause of the distress in Bengal, it was undoubtedly aggravated by general high prices due to short crops in most parts of India.

3. (a) The following extract from a review of the outturn of crops of 1896-97, prepared by the Agricultural Department, will give the necessary information:—

“ *Bhadoi crops.*—The last *bhadoi* season was very unfavourable, being characterised by short rainfall in every

* The numbers refer to the questions drawn up by Commission.

month since July in all parts of these Provinces, except in Orissa. In Orissa the rainfall was excessive in July and August, and caused repeated floods, which destroyed the standing crops over a large area. The total area cultivated with food and non-food crops in 1896 was returned as 15,931,600 acres, against 15,740,900 acres in the previous year. The increase was nominal. Out of 43 districts from which reports were received, only 1 district, *viz.*, Tippera, reported a full average crop; 8 districts, *viz.*, Burdwan, Bankura, 24 Parganas, Dacca, Faridpur, Backergunge, Chittagong and Gaya, reported the crop to be from 12 to 14 annas; 27 districts, *viz.*, Birbhum, Midnapur, Hooghly, Murshidabad, Khulna, Dinajpur, Jalpaiguri, Darjeeling, Rangpur, Bogra, Pabna, Mymensingh, Noakhali, Patna, Champaran, Darbhanga, Monghyr, Bhagalpur, Purnea, Malda, Sonthal Parganas, Balasore, Angul and Khondnals, Hazaribagh, Lohardaga, Manbhum, and Singhbhum, from 8 to 12 annas; and 7 districts, *viz.*, Nadia, Rajshahi, Shahabad, Saran, Mozufferpur, Cuttack and Puri, at less than 8 annas. On the whole, the yield of the *bhadai* crops generally for these Provinces did not exceed 10½ annas, while the yield of the *bhadai* food crops alone did not, perhaps, exceed 9½ annas of a full average crop.

"*Winter rice.*—The winter rice crop of 1896 suffered very seriously from the deficient rainfall of July and August and the early cessation of the monsoon in the middle of September. The absence of rain in October was further aggravated in the riparian districts of East and North Bengal by the unusually low level of the rivers, which did not rise high enough to inundate the *dhils* where much of the winter rice crop is grown. The total area cropped with winter rice in 1896 was estimated at 29,341,600 acres, against 30,402,300 acres in 1895. The decrease was due to the insufficient rainfall during the transplanting season. Out of 45 districts only one district, *viz.*, Bogra, returned a crop as much as 12 annas; 8 districts, *viz.*, 24 Parganas, Dinajpur, Rangpur, Backergunge, Chittagong, Patna, Angul and Singhbhum, estimated it at 10 to 12 annas; 15 districts, *viz.*, Birbhum, Bankura, Midnapur, Hooghly, Darjeeling, Dacca, Tippera, Noakhali, Gaya, Monghyr, Bhagalpur, Purnea, Sonthal Parganas, Puri and Lohardaga, between 8 and 10 annas; 12 districts, *viz.*, Burdwan, Murshidabad, Khulna, Rajshahi, Jalpaiguri, Mymensingh, Faridpur, Cuttack, Balasore, Hazaribagh, Palamu and Manbhum, between 6 and 8 annas; 4 districts *viz.*, Pabna, Shahabad, Darbhanga and Malda, between 4 and 6 annas; and the remaining 5 districts, *viz.*, Nadia, Jessore, Saran, Champaran and Mozufferpur, at less than 4 annas. For the Lower Provinces, as a whole, the outturn of the crop was estimated at only 7½ annas, or slightly below half the average crop."

(b) Prices of food grains were higher in the famine of 1896-97 than in any previous year on record. Generally speaking, prices in 1896-97 were 50 to 100 per cent. higher than those in 1873-74, and in some places more than twice as dear.

4. The preceding year (1895-96) was a year of short crops on the whole. Prices of food grains rose steadily, though slowly, during the rainy season of 1896, and was followed by a sharp rise about the end of September, when the failure of the winter rice crop became certain. The good crops reaped in the preceding two years (1893-94 and 1894-95) enabled the people to tide over the partial failure of 1895-96 without extraneous help, but the short crops of 1895-96 must have told on the usual food reserves in the country. In the Satkhira Sunderbans in Khulna, of which I have special experience, the winter rice crop of 1895 had been very poor owing to injury caused by a storm wave in October 1895, and by September 1896 there was hardly any stock of food grain left in that part of the country. The people, though ordinarily prosperous, were therefore ill-prepared to meet the complete failure of the crop which occurred in 1896 in the greater part of this sub-division.

5. I should like to confine myself to those parts of the Province with which I am specially acquainted. In the distressed areas in the Khulna and Jessore districts, on which I specially reported last year, and which I have known for many years, the condition of the peasantry is one of marked prosperity, judged by the standard of living in other parts of Bengal, especially in Behar and Chota Nagpur. But in the north-western parts of the Nadia district, on which also I reported last year, the condition of the cultivators and labouring classes is depressed at the best of times. In Khulna and Jessore (with the exception of the Bongong sub-division) the number of day labourers is very small and wages are comparatively high; but in Nadia and in the Bongong sub-division of Jessore, there is an unduly large proportion of people living on the wages of day labour. These

people are proverbially poor and are the first to feel the pinch of scarcity. The landless day-labourers are estimated to form from 20 to 30 per cent. of the total population in Nadia. Wages are also very low in the distressed parts of Nadia, varying from 6 to 10 pice per day. The condition of the cultivators also is one of general depression. The land is less productive, and the crops are liable to frequent injury by flood. The raiyats are generally in a state of perennial indebtedness. The northern part of the Nadia district may be said to be the poorest part of Lower Bengal, and is specially susceptible to famine.

There is very little of irrigation in the affected area worth speaking of. Timely and sufficient rain is therefore all-important to all kinds of crops, especially to winter rice, for which, in the absence of irrigation, sufficiency of rain in September and October is imperatively necessary. This is specially the case in the comparatively dry districts of Behar and Chota Nagpur, where the absence of rain in or about the *hathiya* means certain death to the winter rice crop. In the riparian districts of East, North and Central Bengal, the winter rice crop in the low lying *dhils* is practically independent of rainfall, provided the flood is favourable. In the Sunderbans the winter rice crop stands in no need of rain at any particular time of the year, if the salt with which the soil is more or less impregnated has been washed out by a few heavy showers of rain at the commencement of the season, and the water of the rivers has been sweetened by sufficient rainfall and flood water and so rendered fit for flooding the rice-fields.

The districts which are provided with facilities for irrigation, such as Shahabad, Patna, Gaya, Burdwan, Birbhum, Midnapore, and Cuttack, were able to obtain a fairly good winter rice crop in 1896, and escaped famine.

34-35. The existing arrangements are the best possible in the absence of village organisation. Patwaris in the service of Government do not exist in any part of Bengal. Information as to cropped area and outturn of crops is obtained by District and Sub-Divisional Officers mainly through the medium of the Police. Private individuals are also occasionally asked and supply information. The procedure in estimating cropped areas and the outturn of crops is as follows:—In each district estimates of normal areas under different crops have been prepared by district officers. In estimating normal areas every existing source of information, such as economic reports, statistics of estates cadastrally surveyed, statistics of population, consumption, trade, etc., is considered. The annual estimates of cropped areas are prepared with reference to the standing normal estimates, allowance being made by local officers for estimated increase or decrease in area due to the character of the season. The system in vogue in Bengal is similar to the practice of estimating crops in the United States of America.

It costs nothing to Government and is fairly efficacious.

I can suggest no improvement at present except that the existing system of anna notation, according to which 16 annas means an average crop and not a bumper one, as it means in the ordinary language of the people of Bengal, should be replaced by the popular system of notation. This point has been urged on the attention of the Government of India by other Provinces, *e.g.*, Bombay and the Central Provinces. The discrepancy between the official and the current systems of anna notation have very often led to mistaken estimates of outturn.

36. The crop returns published by the Agricultural Department are admittedly rough estimates. But they furnish a fairly good idea of the relative importance of different crops in different parts of this Province, and of the fluctuations in their areas and outturn from year to year. In regard to jute, for example, the general accuracy of the forecasts has been borne out by statistics of exports from Calcutta for many years past, though in one or two years the actual exports were found to have considerably diverged from the estimates made by the Agricultural Department.

37. I believe so. The first forecast of winter rice, the most important food crop in Bengal, is published by the Agricultural Department on or about the 1st October, and the final forecast on or about the 7th December. Of course when the crop fails, Government is apprised of it direct by the district officers. But for the Province, as a whole, the forecasts published by the Agricultural Department contain, I believe, the earliest information available to Government and the public.

38. I believe they were. In the late famine the returns of the Agricultural Department were, I believe, found helpful by Government as well as by local officers.

67. I am unable to suggest any large irrigation project of the kind contemplated. In the Satkhira Sunderbans,

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which do not require irrigation, but protection from the incursions of salt-water, the construction and repairs of embankments will be suitable relief works. In my report thereon, I mentioned cases of estates where, in consequence of extreme sub-infeudation of tenures, embankments were either absent or were in bad repairs. These and many others like these would be suitable as relief works, but the estates being private property, Government interference would require to be enforced by law.

204. I think that agriculturists who are used to manual labour and seek relief, should be made to work on relief works, and not aided with advances for subsistence. Loans given to the poorer classes in famine times only serve to prolong their hardships. Well-to-do cultivators possessed of some substantial property can always obtain loans from private money-lenders, and should not be helped with loans from Government or other public funds; and it is precisely these who are apt to appropriate the lion's share of an allotment for loans when made.

206. It would mean a very large outlay, as every one would try to secure a loan on such favourable terms as those on which loans are given at famine times, and those who need the least will get the most, because they have better security to offer. It would also mean an increase of indebtedness among the cultivators.

259. Yes. The figures of population are as follows:—

1871 (Census of 1872)	60,433,775
1891 (Census of 1891)	71,346,987
1897	74,179,003

The figure for 1897 has been obtained by adding to, or deducting from, the population of each district in 1891 the estimated increase or decrease in numbers during six years, from 1891 to 1897. Taking the populations of 1871 and 1897 as 60,500,000 and 74,200,000 respectively, the increase in the past 26 years has been 22.6 per cent. on the population of 1871.

260. None that I know of.

261. Average increase of population of Bengal per cent. per annum for each year since 1871 cannot be given. The population increased from 60,433,775 to 66,691,456 in 1881, and to 71,346,987 in 1891, that is, by 12.62 per cent. in the nine years between 1872 and 1881 and by 17.96 per cent. in the nineteen years between 1872 and 1891. These percentages are perhaps somewhat in excess of the actuals in consequence of the more imperfect enumeration of the first Census (1872).

262. The increase, so far as the Province as a whole is concerned, is almost exclusively due to the natural and unrestrained fecundity of the native races. In respect of fecundity, the Hindus, with whom marriage is more or less compulsory by religion and public opinion, do not compare unfavourably with Mussulmans and the aboriginal tribes. The latter are specially prolific.

263. I fully believe that were it not for some of the causes mentioned in the question, the population of Bengal would not have increased at the rapid rate at which it has increased since the establishment of British rule in this country. I do not, however, attach much importance to suppression of widow-burning and infanticide, which were never general in Bengal, and which could not have possibly influenced the total population of a large province.

264. The general opinion, in which I share, is that the increase in area under food-grains has not kept pace with the increase of population. In the 19 years since 1881 the population increased by 22 per cent., and although during that period much extension of cultivation took place, an equal or perhaps a larger area was taken up by jute and other commercial staples. In North, East and Central Bengal the universal complaint is that jute has gradually encroached on land which was formerly cultivated with rice. The increasing exports of country produce, consequent upon the increased demand for ready cash to purchase cloth and other articles of European manufacture, have certainly curtailed the area available for the growing of food-grains. The net exports of food-grains from Bengal are not after all considerable, amounting to between 1 and 2 per cent. of the total estimated gross yield. The gradually increasing prices of food staples cannot be wholly or chiefly attributed to this small factor, and must be mainly due to the increasing demand of the local population for food. The food-growing capacity of certain parts of the Province, e.g., South Behar and Cuttack, has certainly been increased by irrigation, chiefly by causing to be brought under paddy cultivation a large area which used formerly to bear inferior crops or was entirely waste. Improved methods of cultivation, as far as I am aware, have not exercised any appreciable influence on the outturn of food-grains.

265. As said above, I attributed the gradual rise in prices of food grains mainly to the growth of population.

266. Not generally. While, in Eastern Bengal, wages have considerably risen during the past quarter of a century, they have remained practically at a standstill in North Behar and Orissa.

267. Yes, in my opinion.

268. I am sure that in whatever way the production of food be increased, whether by extension of cultivation and irrigation or by introduction of improved methods of cultivation, the population would always keep pace, if not outstrip, the increase in production, until either the people have learnt to emigrate on a much larger scale than at present, or some check, artificial or natural, has been placed on the rapid rate at which they have been multiplying.

269. I would encourage emigration, though I do not hope for any great result from it in the near future. The difficulty may be met, in my humble opinion, by introducing some system by which the surplus stock of food grains in good years may be partly held back from the people, who would otherwise waste or part with it, and held as an insurance against years of high price and famine. For this purpose legislation would be necessary. Every cultivator should be made to contribute annually a certain measure of grain (say one maund of paddy for each plough he possesses) to a grain fund. There should be one such fund in every police circle or other convenient unit of area. The fund may be managed either by Government, or preferably by Committees appointed by the District Boards. The grain should be stored until such time as prices have not exceeded a fixed limit, when the contributors to the fund will be entitled to a refund of a quantity of grain equivalent to the sum of their annual contributions, less a certain percentage deducted for cost of management. The annual contributions may continue to be made until the grain fund has amounted to the estimated requirements of the population for three or four months. I need not go into details here, but shall be very happy to lay them before the Commission if desired. The method of insurance now proposed would not only make the cultivators more provident, but would practically make famine impossible.

270. *Vide* above.

271. I think not.

273. In Behar, rice, barley, maize, millets and pulses form the staple food of the labouring and artisan classes. In towns, the people eat less of maize and millets, which are chiefly grown for home consumption. Maize and millets are chiefly consumed in the autumn months, that is, for as long as they would last. They are, generally speaking, done with before December, when the winter rice crop is gathered in. Rice forms the staple food during the rest of the year. Pulses are taken either as a thick soup or like barley, turned into flour or *satu*. *Satu* is taken as refreshment in the morning, and often forms the sole mid-day meal.

In most parts of Bengal Proper and in Orissa, rice is the only staple food. In some parts of Bengal, however, various kinds of millets are grown, but on the whole they afford a very small proportion of the food-supply. In Chota Nagpur and the Sonthal Parganas, millets, maize, and *mahua* are largely eaten besides rice.

274. The general rule is two full meals (one at noon and the other at night) and a light meal in the morning.

In Behar and Chota Nagpur the light morning meal consists generally of some parched grain or of *satu* made from barley and coarser grains. *Satu* is taken with a pinch of salt and a little chilly, and occasionally with a little jaggery. In Bengal and Orissa, the morning meal consists of parched rice, and occasionally of boiled rice or *bhat*. The full meals are eaten with *dal*, curry made of fish or vegetables or both, and various kinds of *sags* or green herbs. Water is the only drinkable taken at meals.

275 276. With the poorer classes, millets and maize and also *mahua*, so long as they are procurable, are the last resort in the absence of rice or barley, which is a luxury to them. The different kinds of food staples of the lower classes stand thus in order of digestibility and palatability:—

Rice.	|	Millets.
Barley.		Maize.
		Mahua.

277. I cannot imagine what other kinds of food grains can be substituted for these. In Bengal and Orissa the people are unaccustomed to the use of millets (except in limited areas), maize and *mahua*; in famine, they could live on millets, which are easily digestible, though not

palatable to those not accustomed to them; but maize and *makua* being difficult of digestion would not be acceptable. In Behar and Chota Nagpur any kind of food-grain would answer for the lower classes, who are accustomed to the use of inferior grains.

282. I think the late high prices throughout India were due to failure of harvests and to unusual lowness of stocks in the greater part of India. The high prices having been maintained throughout, could not be due to unreasonable panic or speculation.

283. There has been a permanent rise in prices of all kinds of food grains in Bengal within the last quarter of a century. I believe the rise in prices has been more marked in respect of rice and wheat than of other food grains, which are not staples of commerce to the same extent as rice or wheat.

283A. Prices were remarkably uniform throughout the greater portion of Bengal in the late famine. There was no visible difference in prices between famine and non-famine districts, except such as were caused by differences in cost of carriage.

284. There was great activity of private trade everywhere in the Province. The action of Government in not interfering with private trade has been fully justified by the results.

289. In the affected areas in Nadia, Khulna and Jessore I can say from my own experience that stocks of food grains at the outset of the famine were so low that they must have been entirely depleted long before the close of the famine. I believe at the close of the famine there was little or no stock from previous harvests left in the Province.

290. In the affected tracts mentioned above, those who had surplus stocks in the beginning of the famine, freely parted with them under the inducement of high prices. I found this to be the case in the affected areas in Nadia and Jessore. There was no disposition to hold them back.

291. Yes, I believe.

292. Yes.

293. The habit has certainly diminished everywhere. Good prices consequent on increasing facilities of communication, the necessity for finding money to buy the necessaries and luxuries of life, the gradual substitution of cash for grain rents in some parts, and the knowledge that grain can be had in the market whenever it is wanted, are the causes which now induce or compel the cultivators and other grain holders to curtail their reserves of food grains.

294. Yes. Private trade has been found as ready to import grain into a tract in a year of scarcity as it is to export from it in years of abundance. This was fully exemplified in the Satkhira Sunderbans, which annually exports a very large quantity of rice, but was obliged to import largely from elsewhere in 1896-97. Private trade was fully equal to the task.

298. Not in the affected areas which came under my own observation; on the contrary, there was a general decline in wages.

305. I would not favour import by Government on any account. The merchants are fully equal to the task. Government interference with their operations is to be deprecated at all times. The appearance of Government in the market even for the limited purpose of importing food required for poor-houses and relief works is likely to disturb the operations of private parties, guided, as they are, by considerations of profit and loss, which would not affect the transactions of Government.

306. There was a heavy decline in the export of all kinds of food grains, the total sea-borne exports from Calcutta during the 10 months, November 1896 to August 1897, having been about 3,500,000 cwts. against 7,650,000 cwts. in the corresponding period of the previous year.

309. Yes; the statistics published by the Government of India contain ample evidence of a permanent rise in prices of food grains.

310. As regards Bengal, the average annual export of food grains does not amount to more than 2 per cent. of the gross yield. I cannot think that it can have any sensible influence on the food supply of the Province. The real cause, in my opinion, of short stocks and high prices is the increasing proportion of the area devoted to non-food crops, as compared with the area under food grains, combined with the increasing demand for food by an increasing population.

312. No.

313. Foreign grain is never imported into Bengal in ordinary years. Mr. B. C. Basu.

313. The general impression was that local stocks would be hopelessly insufficient, and must be very largely supplemented by importations from abroad. Experience has shown the groundlessness of this fear. The total quantity of foreign grain imported into Bengal has not been after all great as compared with the total consumption during the famine. The total imports of all kinds of food grains into Calcutta during the late famine amounted to 87 lakhs of cwts. (part of which was sent to other Provinces), whereas the food requirements of Bengal for 12 months are estimated at 3,355 lakhs of cwts. 4th Feb. 1898.

318. Yes: and prices gradually and steadily rose throughout the famine.

(President.)—I think, Mr. Basu, you have been nine years Assistant to the Director of Agriculture, Bengal?—Yes.

What were the parts of Lower Bengal affected by the famine?—Mostly in Central Bengal. There is a tract of country comprising the riparian districts of Nadia, Rajshahi, Jessore and Faridpur, which were affected by the failure of the annual floods.

Relief measures were wanted in all those?—In Nadia and parts of Jessore and Rajshahi.

And Khulna?—Khulna is not in that tract. The affected area of Khulna is in the Sunderbans.

In Khulna the soil was impregnated with salt, I believe?—Yes. It was impregnated with salt owing to a storm wave in 1895. They used to draw their fresh water-supply from the Ganges, but that source is now cut off.

In your written statement you say that the price of food grains rose steadily during the rainy season of 1896. The early part of the rainy season was good?—There was a favourable rainfall in May only, but in June the rain fell short of the normal, and there was fear of scarcity, so prices gradually rose.

Rather early for the apprehension of failure of rain?—Yes. But all the signs of a weak monsoon were established so early as June.

Is the cultivation good in the parts of Nadia where the population is high?—The affected area in Nadia is more or less peculiar. They have a large tract called the *Kalantar*, which is chiefly devoted to the cultivation of *aman* rice. For the cultivation of this crop annual floods are required.

How do the day labourers live. Do they go much to Calcutta?—Yes. In the paddy cutting season some go to the Sunderbans. I do not know whether there is much emigration otherwise from that part of the country. There are more landless day labourers in Nadia than in other parts of Bengal. In the course of my enquiries, I saw also a large number of Nadia labourers in Jessore.

What castes do these day labourers belong to?—They are of all castes. All low caste Mahomedans, Muchis, etc. The Muchis are an important caste there.

There is very little irrigation in that country?—Very little.

Would it be possible to provide it?—No, it is not possible, because in many years they suffer more or less from floods.

You refer to the system of *anna* notation of crops by which 20 is counted as a bumper crop. When was that system introduced?—That system was introduced by Sir Edward Buck about 10 years ago. I do not remember the exact date.

Do you think the high prices of food grains have acted as a spur to a large extent in increasing the growth of food grain cultivation?—In this year I know some parts which used to be devoted to jute cultivation have been taken up by rice.

Do you think that an ordinary raiyat cultivates as much as he can without much reference to prices?—The price of course is the governing factor as to the particular crops grown. But in most parts of Bengal they cannot get any new land.

Do you think it is true that jute has taken up a good deal of land that used to be under food crops?—It has.

In that district?—From my own personal experience jute does not encroach upon the *aman* crop, but it encroaches upon the *aus* rice.

Mr. B. C. Basu. Is there any other non-food crop?—No. No non-food crop that I know of.

4th Feb. 1898. Indigo has not encroached, I suppose?—Indigo has not encroached on rice in recent years.

What other non-food crops are there in the affected areas?—So far as the affected tracts are concerned, I can think only of jute. In past years there was an extension of cultivation in crops like linseed and mustard.

Is mustard largely exported?—Yes.

In your answer 265 you say "I attribute the gradual rise in prices of food grains mainly to the growth of population." Is that so?—The growth of population and the extension of cultivation of food grains do not keep pace.

(Mr. Holderness.)—You say in your answer 266 that in Eastern Bengal wages have risen. What wages are paid in Eastern Bengal?—Nowhere less than four annas and sometimes five to six annas.

About double the wages in Behar?—More than double.

And about double what they are in Nadia?—The southern part of Nadia is very poor and the wages are very low there.

Your scheme of grain insurance reserves referred to in your answer 269 requires granaries, I suppose?—I would have small granaries at local centres in every district and managed as far as possible by the people themselves, so that they might take an interest in it. If the Commission will allow me, I will draw up a further note explaining my scheme in greater detail.

How long will rice keep good?—Paddy will keep good for five or six years. In my scheme I would give the Committee power to replace old grain by new; people prefer old rice to new.

(President.)—Is *satu* eaten dry?—Yes, with a little water.

Like porridge?—No, it is not prepared like porridge.

You think there is a great rise in prices in Assam?—Yes. In Assam a great rise in prices has occurred just as elsewhere.

Assam I think always imports?—Always imports. Last year we imported about 20 lakhs of maunds of rice. At Shillong, Burma rice was R10 per maund.

Did much Burma rice go to Gauhati?—Yes, a great deal.

It was imported by neighbouring merchants?—Yes, by neighbouring merchants.

Did people succeed in making much profit by it?—Yes, the grain dealers must have made a profit, but I cannot say.

With reference to your answer 290, are you alluding to land-holders or raiyats?—To cultivators, grain-holders, and *mahajans*, who generally keep stocks of paddy and rice.

Had the cultivators large stocks?—The cultivators had very little, but most of the stocks were in the hands of the grain-lenders. That was specially the case in Nadia and Jessore.

You say there was a decline in wages during the scarcity?—Yes.

How did that come under your observation?—I came to know it in the course of the special enquiries I made in parts of the Nadia, Jessore and Khulna districts.

The supply of labour was greater than the demand?—Yes. There was practically little demand, because people were in distress. House-making, for instance, was suspended, and that is one of the chief items of labour.

A witness said that when prices went up in the scarcity of 1873-74, they never fell as low again as they were before that year. And he prophesied that it would be the same this time also. Do you think that will be the case in this famine?—I think that prices will go down again, though perhaps not to the same level as they were before the famine.

(Mr. Holderness.)—You said that raiyats in Jessore kept very little rice?—In Nadia I said.

But elsewhere did they keep stocks of rice?—Yes, they did.

So you are only talking of the distressed tracts in Nadia?—Yes.

Elsewhere the raiyats are prosperous?—Yes.

Then in ordinary years if you took a district in Lower Bengal would you find enough of stocks of rice?—Yes. Every raiyat has got some stock, more or less.

Then you apply your scheme of storage to certain tracts only?—Yes, to certain tracts which are liable to famine.

Does a raiyat ever waste his stock?—He wastes it in marriages and feasts.

Then has this scheme of yours been discussed with anyone or is it entirely your own?—I have never discussed my scheme with anyone.

Have you read the arguments of the Famine Commission regarding storage of grain?—Yes. I read them sometime ago.

In Murshidabad is there a tract similar to the Kalantar tract in Nadia?—Yes.

Was there scarcity there?—Yes, there was scarcity there.

And much the same as in the Nadia Kalantar?—Much the same.

You would expect famine in the two districts if one was affected?—Yes.

Then the measure of relief taken in Murshidabad might be taken as a standard of that required in Nadia?—Yes, more or less, I think so.

You say in your answer 264 the universal complaint is that jute has gradually encroached on land formerly under rice. Has jute improved the condition of the raiyat?—I should say, yes.

The raiyats did not complain?—Both the zamindars and the raiyats like jute because of the great profits they make from it. The people who complained were generally those who had to buy, that is the purchaser of grain. Even the zamindars are in favour of jute.

The "universal complaint" does not really mean universal complaint?—No, only people who have to buy grain. They object to jute because it diminishes the supply of rice for them to buy.

Does not jute bring a great deal of money into the district?—Yes, it does.

Have the jute-growing districts got richer?—Yes. I think the raiyats have got richer.

There was a short rice crop in 1896 in Eastern Bengal?—Yes. Much shorter than usual.

Still there was no necessity for relief?—No.

The increase of population you show in your answer 261 is much larger, apparently, between the 1st and 2nd census than the 2nd and 3rd census?—Yes.

And the percentage of increase between the 2nd and 3rd census is 7 per cent., I think?—Yes, 7 per cent.

Then in your answer to question 308 are the figures you give the net exports or the gross exports?—Gross exports.

That is to say, it might include the rice that came from Burma?—Yes.

Did you make any enquiry into the stocks at the beginning of the famine?—Yes.

What was the general impression that you got from these enquiries. Was it possible to get an estimate of the quantity of stocks?—My experience is that in Bengal Proper it is possible to ascertain stocks; by looking at the golas we were always able to form an idea.

In what districts did you specially conduct your enquiries?—Khulna, Nadia and Jessore.

Would you say there are two classes of stocks, one being domestic stocks?—Yes.

Can you ascertain domestic stocks with the same accuracy as you can the other?—The domestic stock is kept in the houses and is difficult to ascertain.

Then you had to go into the houses?—Yes, I had to go.

Are the Bengal statistics of areas of crops sufficiently accurate to enable us to know that one crop is taking the place of another?—I hardly think so. They are not generally very reliable.

How is that difference ascertained?—The information is imperfect without accurate statistics. But when the District Officer takes sufficient pains over it the statistics are accurate.

In one or two of the Behar districts the survey results have lately been published?—Yes.

Have those results entirely thrown discredit upon the previously accepted estimates?—I do not think they have. But they have shown they were wrong in some respects.

In your paper, Mr. Basu, summarising generally the results of your enquiries as to stocks, you show that the average food grain surplus of Bengal and Behar is five million tons and the average consumption is 19 millions?—That means in a good year, not in an average year.

Do you think your estimate of the probable deficiency of the food supply was right?—I now think that more than ten months' supply was in hand in November 1896. I now think the deficiency was much less than we expected.

What effect have high prices in reducing consumption?—It has a considerable influence in causing economy in consumption.

I think you have seen some of the Assamese districts?—Yes, just a few.

Is there room for extension of cultivation there?—Yes. In the Assam Valley.

Would you consider there is room for some people from Bengal to emigrate there?—There is great opportunity.

Is the climate such that they could live there?—Yes.

You think that the Bengal raiyat could live there?—I cannot say of the Bengal raiyat, but some up-country raiyats have settled down there as cultivators.

A Supplementary Note on the creation of Village Granaries in Bengal by Mr. B. C. Basu, Assistant to Director of Land Records and Agriculture, Assam.

Although the late famine was fortunately tided over in Bengal with a relatively small importation of food-grains, yet there can be no doubt that the food-supply was, on the whole, seriously deficient, and that the deficit was chiefly met, not by imported grain, but by a curtailment of consumption which caused great hardships to the people. It may be conceded that on the average of years, good and bad, Behar, for instance, produces a quantity of food-grains which is at any rate sufficient for, if not in excess of, the requirements of its population, dense as it is. If this premise be granted, it would follow that there must be something wrong in the economics of the Province, which prevents the people from fully utilising the surplus production of good years. In my humble opinion, the inability of the people so to adjust their food reserves is mainly due to the agriculturists having practically ceased to be masters of the produce of their own cultivation. The control of the food-supply has unnaturally passed into the hands of a class of men (the village grain-lenders or banias), with whom grain-dealing is purely a matter of business, and is but slightly affected by considerations of future want. It is said that the bania does the saving for the raiyat, and thus ensures some kind of equilibrium between good and bad years. This oft-repeated statement is, I venture to think, true only to a limited extent, for the bania, who has always an eye to profits, does not scruple to sell off his stocks whenever prices appear to him to be favourable. If the raiyats, on the other hand, had the disposal of the produce of their labour in their own hands, they would be inclined to part with less of it, and retain more for their own requirements.

The restoration of the control of the food-supply to those who produce it may, in course of time, be accomplished by the gradual establishment of co-operative agricultural associations, and of village granaries owned and managed by them. An association of this kind should confine its operations to one village or group of villages, and conduct them on purely co-operative principles. It is in the power of Government to further the formation of co-operative agricultural associations—first, by giving legislative sanction to their creation and existence, and investing them with certain legal powers and privileges, such as those stated in the draft Bill appended to the Hon'ble Mr. Nicholson's Report on the introduction of Agricultural Banks into the Madras Presidency; and, secondly, by helping with its advice and support the establishment and management of a few such associations in different parts of India. With regard to the constitution, procedure and functions of co-operative agricultural associations, I need only refer to Mr. Nicholson's Report. Among their many useful functions, the one I have immediately in view is the maintenance of granaries out of which loans could be given to members in case of need. In fact, an association should, in this respect, take the place of the bania, with this difference, that it should be able to lend grain at a rate of interest which may be called nominal, in comparison with the usurious rates of the bania, while its transactions should be free from those mal-

practices which often characterise the dealings of the bania, and ultimately land the victims of their cupidity in ruin. Unlike the bania, the association should have no temptation to sell off its stocks in the presence of high prices; its tendency would rather be in the opposite direction.

A co-operative agricultural association, provided, as they should be in India, with banking powers, should have no difficulty in creating a grain reserve. It may levy an annual grain contribution from its members, for which they should receive due credit in its books, or it may devote a part of its funds to the purchase and storing of grain.

The mere reduction of the rate of interest on grain-loans will necessarily result in a larger share of the produce of cultivation being retained in the hands of the cultivators. An association may still further promote this end by making cash advances on agricultural produce deposited in its hands, and on standing crops, to agriculturists in immediate want of money for rent or other purposes, and thus saving them from the necessity of parting with these at unduly low prices.

In concluding his notice of the Spanish *Positos*, Mr. Nicholson has recommended the establishment of village granaries as an insurance against famine. The best agency that I can think of for creating and maintaining these granaries, would be co-operative agricultural associations, such as those Mr. Nicholson has so strongly recommended in his Report. Grain lending should be among the principal functions of every co-operative association of agriculturists established in India. Cash loans are not quite so convenient to agriculturists for the purpose of subsistence. A cultivator would generally require assistance at a time of the year when prices of food-grains are comparatively high. A cash loan at the time would mean a relatively small quantity of grain, while at the time of re-payment, which is usually the cheapest season in the year, he would be put to the necessity of selling a disproportionately large quantity of produce to repay his debt in cash. Grain-loans would be free from this disadvantage, while the practice of lending in grain would necessitate grain being stored, and thus tend to augment the food-reserves of the country. It is, therefore, highly desirable that when co-operative agricultural associations are established in India, they should open and maintain granaries, out of which loans could be issued to cultivators in want of food or seed.

In my evidence before the Famine Commission I suggested the establishment of granaries maintained by compulsory contributions of grain levied from cultivators in years of plenty, in order to provide for their maintenance in a year of scarcity. I fear, however, that the principle of compulsory contribution, even for the ultimate benefit of those very persons from whom it may be levied, will not meet with the approval of Government, or be acceptable to the people. The scheme is also open, and though to a less extent, to the same objections as were urged by the Royal Famine Commission of 1878 against the storage of grain by Government. I feel bound, therefore, to drop my original proposal. None of these objections can, however, apply to granaries owned and maintained by co-operative associations of agriculturists, who in this respect, would merely take the place at present held by the banias. Nor is it contemplated that these co-operative granaries should be kept closed until a failure of crops has caused prices to rise beyond a fixed limit; on the contrary, the granaries should be open at all times for the issue of loans, and thus partake of the character of private grain stores, which cannot be accused of exercising a disturbing or paralyzing effect upon the grain trade at any time.

In this note, I have purposely confined myself to the benefits likely to accrue to the country from granaries established by co-operative agricultural associations. It is only one among many highly useful functions which associations of this kind can render to a country. For a description of these, I beg leave to refer to Mr. Nicholson's Report above alluded to, and to an equally interesting Report on Popular Banks by Mr. Wolff. Their description of the apparently unfavourable conditions in which co-operative institutions of different kinds have taken root and thriven in many parts of Continental Europe, fills one with the hope that these may equally succeed in India. Japan is reported to have imitated the example, and in China co-operative agricultural banks are said to be ancient institutions, which have rendered capital service to agriculturists for many centuries. It is time, therefore, that a beginning should be made in this country. Unfortunately the matter is one in which the efforts of Government alone can be of little use. For the success of these institutions, private disinterested initiative is absolutely indispensable. The idea of

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co-operation is not altogether foreign to the people of Bengal, but very few people, even among the educated classes, have any knowledge of co-operative agricultural associations and of the service they can render to a country. It is highly desirable that a knowledge of what has been accomplished in

this direction in foreign countries should spread among the people. I cannot think of a readier means of promoting this object, than by publishing cheap vernacular epitomes of Mr. Nicholson's official Report, which deserves to be widely read throughout the country.

The Hon'ble Mr. J. G. H. Glass, C.I.E., Chief Engineer, Government of Bengal, called in and examined.

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I put in written answers to the Commission's questions.

* 52. This entirely depends on the quantity of work to be done. For an ordinary road of the class usually constructed in Behar, we may assume a top width of 24 feet, height of bank 2 feet, and side slope of 2 to 1. This gives a section of 56 square feet, and the quantity of earth-work per mile will, therefore, be, say, 296,000 cubic feet. The lead will usually be under 50 feet, and the mean lift under 3 feet. The soil in Behar is ordinarily soft, so that for famine relief purposes on the task-work system, the task for the diggers may be put at 200 cubic feet. To complete the excavation would therefore employ $\frac{296,000}{200}=1,480$ diggers for one day, and at 3 carriers per digger, $1,480 \times 3=4,440$ carriers would be required. For dressing slopes, breaking up clods and surfacing, and other miscellaneous work, 8 persons per chain or, say, 400 for the mile, should suffice. This gives a total of 6,320 persons per mile per day for a road of the dimensions specified. If the road is metalled for a width, say, of 12 feet, there will be additional earth-work in making up the sides and increasing the width at the level at which the metal is put down in order to have a completed surface width of 24 feet, of which 12 feet would be metalled and 6 feet on each side of earth berms. Taking a thickness of 9" of metal, the width of the road, when ready to receive the metal, would be 26 feet. Roughly, this would increase the number of day units to 7,500 per mile. The quantity of metal necessary would be $\frac{3}{4} \times 121 \times 5,280=47,520$, say, 48,000 cubic feet per mile. The number of persons required to provide this quantity would depend a good deal on the quality of the stone and the distance it had to be carried. About 5 cubic feet per diem per male unit may be taken as a fair task for hard stone, such as basalt, broken to 1 $\frac{1}{2}$ ". The number of day units would therefore be $\frac{48,000}{5}=9,600$. Stacking, screening, spreading and consolidating would engage the services of 8 persons more per 100 cubic feet, or $480 \times 8=3,840$. A reserve of 4 $\frac{1}{2}$ " thickness of metal would suffice for repairs and renewals under ordinary traffic for four years, or say, 24,000 cubic feet, giving work for 4,800 persons.

An unmetalled road of the kind indicated would therefore employ, say, 6,300 persons. If metalled, it would employ—

(a) Earth-work	7,500
(b) Metal collection	9,600
(c) Consolidation, etc.	3,800
(d) Reserve metal	4,800
TOTAL	25,700

I may note that a large number of the roads in Behar are not metalled.

53. All the roads I saw will undoubtedly be of permanent use to the community if kept up, but I vary much question if the funds available will permit of their being maintained efficiently.

54. The question of what new roads it would be of advantage to undertake is one that can only be determined by the local authorities.

55. I think it is an excellent form of employment for relief labour. The task is easily set, and the outturn can be measured without difficulty. It would not, however, be easy to find such work in Behar or Lower Bengal.

56. No metal was collected by the Public Works Department in the recent famine in Bengal.

57. (i) The excavation of tanks is an excellent means of employment, the work is concentrated, and labour on it can be readily controlled. Also, if the work is properly laid out, the contents can be easily ascertained, and the returns of progress readily checked.

(ii) If the tank water can be used for irrigation it would no doubt be a benefit to the village. As a source of water-supply for domestic purposes, the advantages are very questionable.

59. (1) This depends upon the area. We may take it that to prevent overcrowding on tank work each digger should have 100 square feet for himself and his complement of carriers.

(2) If skilled supervision is not available, and it was absolutely necessary to provide employment for the villagers, the best plan would possibly be to calculate the quantity of work to be done, fix a rate and inform the headman of the village that he would get so much in cash for each foot in depth excavated: the amount to be distributed amongst the villagers engaged on the work. The rate fixed for the work would be determined on a consideration of the extent of the distress in the village. The rate could be made so low that, in order to earn a wage sufficient for their daily needs, the people would have to work hard. The severity of the task is, to some extent, but not altogether, a measure of the necessity for relief. For instance, the task set must be a possible one, that is, one which an ordinary labourer could perform in a certain number of hours. My experience of labour in India goes to show that the opening of a work anywhere at any time with food at normal prices at once attracts the people from surrounding villages. It may not in all cases be possible to get as many together as are wanted to finish the work expeditiously, but some will certainly come, no matter how cheap food may be. The numbers attracted will no doubt be greater when food is dear, but even when it is cheap and no scarcity exists, a certain proportion of the population will always be glad to get work by which they can earn something. So long as the task is a possible one, I think it may be accepted that the opening of a work will attract labour.

60. I am not in a position to answer this question definitely. Twenty years hence a large number of the tanks made during the recent famine will have silted up, and employment can be found for large numbers of people in deepening them.

61. None.

67. An excellent note has been drawn up by Mr. R. B. Buckley, Superintending Engineer, Sone Circle, on the protection of North Behar from famine, in which several irrigation schemes are mentioned. The note is dated 5th June 1897, and a copy can be obtained from the Bengal Secretariat.

70. The provisions are contained in sections 5 (2) (ii and iii) and 6 of the Bengal Famine Code. So far as I am aware, the requirements of the Code were not attended to. When I was inspecting in Behar in December 1896, I noticed the absence of a programme of works, and with the Commissioner and Mr. Mills, Superintendent of Works, one was drawn up and was submitted with a brief note to Government on the 23rd January 1897. A staff was organised by the Public Works Department for the surveys of the Sakri-Jainagar Railway (30 $\frac{1}{2}$ miles), the Bettiah-Bagaha Railway (49 miles), the Tribeni, Baghamati and Dhaka Canals, all of which were eventually undertaken as famine relief works.

71. (a) From 2 to 3 miles; (b) no limit.

72. If they would not attend works from 2 to 3 miles from their villages, or refused to leave their homes and settle down on a work, it would be a fair inference to draw that they were not in need of relief.

73. Certainly.

74. The exception.

75. No.

76. I think relief works should be as far apart as possible. It was not unusual, as I understand, in Behar for persons to put in an appearance at two or more works in the same day, and draw the penal or other wage at both. This could not have happened had the works been far apart. The rule I laid down was that works should not be less than five miles apart. With a population so dense as it is in Behar, it is only in exceptional cases possible to have works away from villages. I do not think that a high task and low rate of wage are sufficient tests in themselves, as there is always a

* The numbers refer to the questions drawn up by the Commission.

proportion of the population willing to work if they can get it.

77. My experience of the people in Behar is limited, and I cannot, therefore, answer this question with any certainty as regards them. I was through the Orissa famine of 1866-67, and was engaged on the construction of a large canal with many distributaries. The people lived on the works in large numbers, and no difficulties ever arose, so far as I can recollect, in moving them about from place to place. In 1873 I was Executive Engineer of the Jubbulpur Division, Central Provinces. Mr. (now Sir Charles) Crothwaite was then Commissioner of the Jubbulpur Division, and he and I had to arrange for employing large numbers of persons who had come in search of work from the Etah District, North-Western Provinces (I think), where scarcity at the time prevailed. They were employed on the construction of the Jubbulpur-Damoh Road, chiefly on earth-work and stone-breaking, and were paid at piece-work rates. They lived on the works and huddled themselves, an allowance being made to them for doing so. I think they were given a wage for two or three days whilst engaged in constructing the huts. From conversations I had with them I understood that it had been the custom of their forefathers, when scarcity occurred in their own country, to make for Chhattisgarh, the South-Eastern Division of the Central Provinces, which they described as the land of plenty. I have carried out work on a large scale in many parts of India, and I never experienced any difficulty in getting labourers to reside on the works. It is, I believe, the ordinary practice of the people, in at least one of the districts of Behar, to leave their homes in large numbers annually in search of work. On the Tribeni Canal and the Sakri-Jainagar and Bettiah-Bagaha Railways, which were carried out during the recent famine chiefly on the piece-work system, the labourers resided freely on the works, and, so far as I know, no difficulties were experienced in getting them to do so. It seems to me, therefore, unreasonable to suppose that the people generally would sooner submit to great privation than go to a distance from their villages for work. No doubt they would prefer to be provided with work at their doors.

78. Certainly not.

79. No.

80. Details of this are not at present available. On the Sakri-Jainagar Railway, which was done by piece-work during the famine, the total expenditure on hutting was about Rs. 1,000. The length of the line is 30½ miles.

81. No.

82. No.

83. The proportion varied considerably. On some works the proportion was very much higher than on others. It is probable that this can be accounted for by greater care being taken on some of the works than on others in the selection of fit objects for relief as dependants.

84. Figures are not yet available for this.

85. No; not for all.

86. It seems to me that piece-work is the most suitable form of employment for able-bodied persons on famine works at all times. At the outset of a famine, when distress is not acute, piece-work is the most efficacious safeguard against people flocking to the works who are not really in need of relief; and not only so, but it renders impossible the fraudulent designs of the mohurrirs and other subordinate employes who are only too eager to avail themselves of the means afforded by the task-work system of embezzling money. It is well known to all who have had practical experience of famine works that the class of people referred to are corrupt in the extreme, and that no small portion of the money spent on relief finds its way into their pockets. At the commencement of a famine, when relief is afforded on the task-work system, it is almost impossible to prevent fraud. Everything is more or less in a chaotic state, and it takes time to bring about order. Even when order has been obtained, there are still many opportunities which render it a matter of no great difficulty for dishonest persons to attain their ends. All the Public Works officers engaged on the recent famine in Bengal, to whom I have spoken on the subject, are strongly of opinion that on the task-work system it is not possible to prevent swindling, and this entirely bears out my own experience. Besides the task-work system involves the entertainment of a large subordinate staff for the purposes of mustering the labourers, making and checking measurements and the keeping of accounts. It also involves considerable interference with the labourers themselves which they do not like, and much of their time is wasted (from the labourers' point of view) in forming the gangs, mustering them, and setting them

to work. All these disadvantages practically disappear under the piece-work system. The conditions under which I would recommend the introduction of the piece-work system are briefly as follows:—

First.—That relief works are necessary.

Second.—That the people are not already reduced in physique from want.

Third.—That professional agency is available to carry out the works.

To carry out this system to the best advantage, it is necessary that a programme of works to be undertaken in each district liable to famine should be drawn up beforehand. Each project should be surveyed (if necessary), and a careful estimate prepared in the fullest detail showing the amount of each class of work contained in it. In the case of canals, railways, roads and tanks, the estimates should be prepared in such a manner as to show in each chain or other unit the quantity of earth-work or other work to be done in it. These should then be abstracted under the various heads, such as clearing jungle, earth-work, dressing slopes, stone-metalling, etc., etc., and measurement books, similar to those kept on the Sakri-Jainagar Railway, which was constructed on the piece-work system during the recent famine in Behar, should be prepared for each project giving their details of the work to be done in each chain or other unit. The measurement books should be filed with the projects to which they refer, so as to be ready for issue when work is started. I attach much value to the measurement books, as they afford the person in direct charge of the work a ready means of ascertaining what has to be done, and with ordinary care and attention, it is impossible for him with the measurement books before him to bill for more work than has actually been done without detecting the error. They also give the superior officers a safe check on the work of their subordinates. On intimation being given by the civil officers of the necessity for opening relief works in a certain locality, the project or projects situated in it should be started. The people seeking employment should be told by the Public Works officer in charge that work will be given to them at rates which have previously been settled in consultation with the Civil authorities, and they should be directed to form themselves into gangs of moderate size containing, say, from 100 to 150 persons in all, and to appoint in each gang a headman to receive and disburse to the members of the gang the payments made to him on account of work done. This system is thoroughly well known to the people, and they would fall into it without difficulty to themselves or trouble to the officials.

At the outset it would very seldom be necessary to have more than one rate for the same class of work. That is, if relief was started before the people had actually suffered from a want of food, there would be no necessity to differentiate between the strong and the weak. Later on, if distress became acute, it would of course be necessary to do so.

87. My experience is distinctly in favour of piece-work from the commencement. I do not think that the objections stated by the Famine Commission in regard to piece-work would be found to exist in the case of some 75 per cent. of the people seeking relief. The ordinary agriculturist is accustomed to dig, and when works are started in ordinary times, people of that class readily take to piece-work. The professional labourer usually prefers piece-work.

88. I would pay them at a higher rate until such time as they had improved in condition or become sufficiently skilled to earn a proper wage at the normal rate.

89. I am not quite sure that it would be either expedient or necessary to limit the earnings on piece-work of skilled labourers. The proportion which this class would bear during a famine to the numbers engaged on relief works, would be very small, and if they were paid at lower rates than those working alongside of them, they would not understand why they were so treated, and the result would probably be that the gangs would break up, and the members would join themselves with less expert workmen. If any limit at all is thought desirable, the proper form for it to take would, I consider, be that mentioned in paragraph 25 of the note by Mr. Higham on Famine Relief Works in Bengal.

90. I think there would be no difficulty in dealing with gangs numbering 100 to 150 persons. I would not fix that number definitely, but would leave the decision a good deal to the discretion of the Engineer in charge. As an Assistant Engineer in charge of a sub-division, in which there was a large amount of earth-work carried out on the piece-work system, I frequently had gangs consisting of one or two families, representing, say, 10 or 12 persons; but having

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such small gangs to deal with entailed considerable labour in making measurements and preparing bills, whilst it added to the risk of over payment. I think it will generally be found that gangs, numbering about 100 persons, are the most suitable.

91. There might, and probably would be cases where the headman would cheat his labourers, but my experience is that ordinarily the wages are fairly distributed. It may be taken for granted that the Indian coolie is quite alive to his own interests, and that if the headman cheated his labourers systematically, there would soon be an outcry, and he would be deposed. A question which arises in connection with this matter is how the headman would be remunerated. In the case of large gangs of 100 persons and more, it would certainly not be possible for the headman to do much actual digging, as his time would be taken up in arranging the labourers, seeing that they were carrying out the work in accordance with orders, distributing payments, settling disputes and other matters. On the Sakri-Jaidagar Railway, for instance, it was found expedient to pay the mate by giving him a commission on the outturn. This was fixed at one pie per 100 cubic feet, and the gangs generally contained about 150 persons, all told. I put up a copy of the very interesting and instructive note * prepared by Lieutenant Close, B.E., on the manner in which the work of the Sakri-Jainagar Railway was carried out. It contains much information of a useful kind.

92. I cannot furnish the information at present, but can do so later on. The reduction in establishment, owing to there being no necessity to keep nominal muster rolls under the piece-work system, would be considerable, and there would besides be much less opportunity for fraud.

93. I should think not the slightest.

94. I agree with Mr. Higham in the recommendation made by him in paragraphs 12 to 15 of his final note as to the future classification of labourers on task-work. The fewer classes there are the better.

95. I have no opinion to offer.

98. Ten years as a general rule.

99. Labourers, who persistently refused to perform the allotted task, should be removed from the works, and should receive cooked rations.

100. Quite unnecessary, I think.

101. The opinion of the engineers engaged on relief works during the recent famine, as gathered from their reports and from conversations I had with them from time to time during my inspections, was, that large numbers of the people were quite satisfied to draw only the penal wage; and as the health of the population was generally good throughout the famine, it is improbable that they were enfeebled thereby. The task prescribed was not a heavy one, and no labourer in ordinary health should have found any difficulty in performing it.

102. I am not.

103. Yes, in the case of task-work labourers. There should be at least three days' previous attendance to entitle labourers to the Sunday wage.

104. Yes, I do.

105. Yes; in the case of soft soil Mr. Higham's formula practically agrees with the Bengal Tables for proportion of carriers to diggers. In hard soils there is, however, a divergence, Mr. Higham's formula giving a less number of carriers than the Bengal Tables. I think it would be of advantage to have a set of tables drawn up, based on Mr. Higham's formula showing the proportion of carriers to diggers, under the varying conditions of lead, lift and soil. These tables should find a place in all Provincial Famine Codes.

106. I accept the value taken by Mr. Higham.

107. It is possible to do so, but it would be a matter of time. If the works were carried out by professional agency, as they undoubtedly should be in my opinion if economy is to be studied, the works could be started at once on proper lines.

108. Two or four diggers, with their complement of carriers.

109. Yes, I do. It is a modified form of piece-work. Mr. Long, Executive Engineer in charge of the Darbhanga Division, states in his report of the operations carried out by him, that limited piece-work was in general use on his works before he knew anything of Mr. Blackwood's system. I think it is preferable to ordinary task-work but not to piece-work. The advantages of it are that the people know what

they have to do, and that Government gets a proper tale of work for the wage paid.

112 and 113. I have not yet got information on the points mentioned.

114. Small works, such as surface repairs to roads, deepening of tanks, etc., on which only small numbers of persons would be employed, should, in my opinion, alone be carried out by the Civil Department. There are a thousand other matters during the occurrence of a famine on which civil officers can more profitably employ their time than in looking after works, of which it is not possible they can know much. All large works should be left to the Public Works Department, such as canals, railways, raising roads or the construction of new roads, and the excavation of tanks, where the numbers employed are considerable, say, over 500 per diem. It stands to reason that works can be better managed and labour more economically employed by professional men than by amateurs.

115. In regard to the actual management of relief works entrusted to the Public Works Department, the Civil Department should be in no way concerned. The control and direction of such works should rest entirely with the Public Works Department.

116. The Collector should fix the rate of wage in the case of task-work in consultation with the Commissioner, and in the case of piece-work, the Commissioner, the Collector, and the Public Works Department Officer (the Superintending Engineer), should determine the rates to be paid in the several districts where relief works are to be started. The Executive Engineer should be responsible for all professional matters, the accuracy of the measurements, the correctness of the accounts, that the people were properly paid, and that the sanitation of the work and its surroundings were satisfactory, that is, his responsibility would be the same as attaches to him in the case of ordinary public works.

117. No answer necessary, as I do not recommend that the Collector should have any control over works under the management of the Public Works Department.

118. European non-commissioned officers are said to have done admirably in Behar. Many of the educated natives locally obtained or transferred from other parts of Bengal also did good service. Officers in charge would not be necessary on works carried out on the piece-work system.

119. Distinctly.

120. Yes, I do.

121. It would be an immense advantage to give inspecting officers, of the rank of Assistant Engineer and upwards, Magisterial powers of the third class.

122. They were based generally on the same lines.

123. I think that if the Public Works Department in Bengal had been on a more satisfactory footing in the matter of establishment than it was, it would have tended to economy in several directions, if the carrying out of relief works had been entrusted to professional agency from the commencement. Owing, however, to the very reduced state of the Public Works establishment, and the large number of works which were opened in various parts of Behar at the same time, it was quite impossible to do so. The strength of the Roads and Buildings Branch of the Public Works Department, exclusive of the Chief and Superintending Engineers, is 15 officers and 88 subordinates, but during the famine there were employed on relief works in Behar alone no less than 31 Engineers and 176 subordinates, brought together from every possible source.

124. (i) Daily, if possible.

(ii) At first rough measurements should be made in order to pay the people daily, but when they had settled down to the work the banias would give them credit, and it would be sufficient to make payments weekly, or at most twice a week.

125. I think for facility in payments and for purposes of fines when the work is short, I incline to the piece unit, but the matter is not one which has specially engaged my attention.

126. When payments are made daily, I think the gang mohurrirs must be entrusted with disbursements; otherwise a large staff of cashiers would be necessary, especially where the number of labourers was considerable.

127. I do not think so.

128. I have had much experience of the aboriginal hill tribes in the Central Provinces, but not in Bengal. I have not had to do with them in times of famine. I have had

* Not printed.

great numbers of them on works, and invariably found them easy to manage when treated with kindness. They always worked by themselves, and would not join with the people of the plains.

129. As a maximum, I should think 3,000. But with a really good officer in charge it might be increased to 5,000. It would not be an economical arrangement to have less than 1,000 in a charge.

130. I am in favour of kitchens, as they ensure a proper supply of food being given to the children.

133. A complaint did reach Government from the Mughlsarai-Gaya Railway, and I think also from the Bengal North-Western Railway, that labour was attracted from their works by the opening of relief works in the neighbourhood.

134. From enquiries made, it seemed to me that the rate given on the first mentioned railway to the contractors was not enough to admit of the labourers earning a wage sufficient to live on. The rate given was Re. 1-8 per 1,000 cubic feet.

135. They were not at the time I heard of the complaint. They were normal and had not been increased with the rise in the price of food.

136. Yes, i.e., if the rate paid to the contractors, as reported by the Commissioner of the Patna Division, is correctly stated, viz., Re. 1-8 per 1,000 cubic feet.

137. I would not open any Government relief works within a distance of, say, from 8 to 10 miles of a large railway under construction which offered suitable employment at proper rates for the people. To induce private employers to give a sufficient rate, Government might with advantage pay something towards the cost of the work. Taking, for instance, the normal rate at Re. 1-8 per 1,000 cubic feet, it might pay Government to give a subsidy to the employers such as would raise the rate per 1,000 cubic feet to what was considered sufficient. In such a case it would be necessary to ascertain, first, that the distress was of such a nature as to require help from Government, and second, that labourers were not imported from districts where there was no distress. This would, I should think, be more economical for Government than the starting of relief works on its own account.

138. (i) I cannot say; (ii) no.

139. Some of our railways, which are now only a single line, might with advantage be widened for a double line of rails. In this direction alone employment could be found for large numbers of people, and the work would be of a kind which would ultimately be useful.

(President.)—You are the Chief Engineer of Bengal?—Yes, I am.

You only came there lately?—About 2 years ago.

Had you any previous service in Bengal?—Yes. I was in Orissa at the time of the 1865-66 Famine.

How do you compare the two famines?—The conditions of the two famines are entirely different and no comparison can be made.

How far did prices of rice go up in 1865-66?—I cannot say.

(Mr. Higham.)—Was there any road-metalling work at all in Bengal during the famine?—I do not think so. In Behar generally the roads are not metalled, and as a rule metalling is out of the question for relief works there. We cannot rely on road-metalling for relief.

You mention in your reply to question 57 (ii) that the advantages of tanks as a source of water supply for domestic purposes are very questionable?—Yes, though of course they are of some use for village purposes; I do not know whether they are sometimes used as reservoirs for fish. I believe the making of tanks is very popular with the people—the Hindus looking upon it as a sacred work.

Had you any village contractors of the kind referred to in your answer to question 59 (2)?—I do not think my suggestion of a village contractor was actually put in force anywhere during the late famine.

Is it not necessary to close the tanks when the rains come on?—To some extent. But they can be dressed off in the rains.

Tank works are carried on in the dry weather instead of the roads?—Yes, if I had both works, I certainly would take them up in that order. I would take the tanks in the dry weather and the roads during the rains.

You had much difficulty after the rains in finding work?—No, we had no difficulty.

You had certain railway works. What was the arrangement? Can you say under what arrangements you undertook the work?—We did the work as famine relief work, and we hope to get the money back from the railway hereafter.

There was no arrangement made beforehand?—We did not correspond with the Bengal and North-Western Railway. We corresponded with the Government of India. Nothing has been settled yet as to what we are to be paid.

Are they going to open them now?—I presume so.

They are on the programme?—Yes.

Has the Sakri Railway been completed?—Yes.

With regard to the provisions mentioned in your answer to No. 70, had there been any preliminary surveys or discussions regarding the works before you went there in December?—Not that I was aware of.

Work was commenced on them in March?—Work commenced long before March. In the beginning of January.

You began the works first and surveyed afterwards?—No, what surveys were required we did before we started any work.

The survey was carried out in 3 months?—Yes.

There was no previous survey?—No.

But about the canals?—The large works referred to in my answer 70, had been considered before and some had been surveyed many years before, but before being taken in hand, they had to be re-surveyed.

With regard to your reply to question 76 you mention that "it was not unusual in Behar for persons to put in an appearance at two or more works on the same day and draw the penal or other wage at both." Was this generally the case?—Not generally. I only report here what I heard from Public Works Department officers on famine duty. I did not actually myself see a man attending two works.

Do you recommend that non-agricultural labour should be drafted from small works to large works?—Yes.

Small works should feed the large works?—Yes.

With the purely labouring classes?—Yes.

But with the cultivating classes?—It is very difficult to distinguish between the labouring and agricultural classes. I do not see that there is any great difference between what you call the professional labourer and the ordinary agriculturist.

You think that drafting from small works to big works should be done by the Public Works Officers?—I think it had better be done by the Civil Officers.

Is residence on the works so distasteful to the people that they will undergo extreme privation before they submit to it? Can you point to any instances in which this feeling has prevented relief offered under conditions of residence from being effectual, or any in which it has passed away or become less intense after a short trial?—I have no experience of anything of the kind.

People generally prefer that their children should work?—Not altogether.

As regards piece-work, in answer to No 86 you consider "that piece-work is the most suitable form of employment for able-bodied persons on famine works at all times"?—Yes. All Districts in Bengal have their District Engineers, and there can be no difficulty at any time in introducing piece-work. As distress deepens, it may be necessary perhaps to have different rates for different classes of labourers. I read paragraphs 4 and 6 of Mr. Hare's printed note of evidence which is shown to me. I think it would be a difficult matter to differentiate as therein suggested. If done, it could be done by a Public Works Department Officer as well as by any other officer.

Do you think it ought to be done by the Public Works Department officers?—I think it could be done by the Public Works officers just as well as by any other officers.

Do you know whether the rates on task-works were changed from time to time?—I do not think so. Not that I know of. The task was fixed according to the soil.

Turning to your answers to questions 89 and 90, do you not think there is a danger of the system developing into one of petty contract?—No, I doubt if there is danger with big gangs of the system developing into petty contract. It must be remembered a famine is only a very temporary thing. I

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doubt if really the women and weak would be crushed out. I would only have large gangs on piece-work and not on task-work.

You would not have any gang of 150 on task-work?—No, certainly not, only on piece-work.

You would allow them to make as small a gang as they like?—Yes.

Would you propose a different task and wage for men and women within the same class?—I do not think I can give an opinion on that.

With regard to the employment of children, do you think that children above 12 ought to be treated as adults? I suppose that depends more on what food they require than on what work they can do. I would extend that to 14. I do not think that a child of 12 can do the work of an adult, and I believe he scarcely requires the food of an adult.

Are you in favour of employing children below 12?—No.

What do you call the penal wage?—In my answer to question 101 the penal wage is a wage one pice less than the D wage.

With regard to your replies to questions 104 and 107, you think that an uniform standard task for carriers is necessary?—Yes. I agree that the number of carriers is independent of the quality of the soil.

When failure of crops has caused great rise of prices and expectation of famine in a district, but its circumstances are such as not to justify the opening of relief works, or even of test works, is it good policy to at once arrange for special employment of labour by the Public Works Department on ordinary terms? Would such action enable large numbers of labourers to retain longer their independence and their full working power, and in that way would it stave off the time when large numbers become so pinched that private charity and mutual help cease, and famine relief becomes a necessity?—Yes, to both parts of the question.

After a famine has been ended by good crops and a fall of prices, is it sometimes advisable to make provision for special employment of labour by the Public Works Department on ordinary terms in order to assist the very poor who have been left without resources, till a continuance of better times has completely restored them to their normal condition?—Yes.

Under existing rules of account would expenditure incurred in the cases and under the conditions described in the two preceding questions be met from the budget provision for ordinary Public Works, or would it be charged to Famine Relief?—Under present arrangements such expenditure would not be charged to Famine Relief. At present all expenditure for lands which have to be taken up for roads constructed as Famine Relief Works is charged to the Provincial Budget and not to Famine Relief.

Can you charge any work to Famine Relief which is not conducted according to Famine Relief principles?—No.

If it is done as an ordinary Public Works function, you would charge the Public Works Department?—Yes.

Would you place small works also under the charge of Public Works officers?—Yes, I would.

What would you leave to the civil works officers?—The deepening of village tanks.

The test works?—Yes.

With regard to question 115, you think the Collector should have no voice in determining whether work should be conducted as piece-work or task-work?—I think the Collector should have no voice in the matter. I have read paragraph 15 and succeeding paragraphs of Mr. Hare's written note. With reference to that I think it is a matter which should be settled in discussion by the Collector, Commissioner and the Superintending Engineer. I would not have the Collector sole judge.

Has the Collector any voice in fixing the task?—No, only in fixing the rate of wage.

The rate of wage depends simply upon the market prices?—Yes. If he thought the rate either too high or too low he could always make a representation.

Would it not have been possible for the Public Works Department to supervise some of the works on behalf of the Collector better than he actually did?—Yes. But at the same time I think that in most districts, except Saran, the hands of the Public Works Department were as full as they could be. We could scarcely have done anything more than we did. I think the introduction of the Public Works Department even on a small proportion of the works had a very beneficial result.

You consider that payments made daily should always be made through mohurrirs and not through cashiers. Were they not made daily?—Well, they were made weekly or twice a week excepting on piece-work.

(*Mr. Holderness.*)—I believe you are generally in favour of piece-work without a maximum as a form of relief?—Yes.

Do you think that is compatible with the principles laid down by the Government of India in Famine circular 16-104, of 13th February 1897?—I do not think it would be at variance with these principles. It would not attract people from other places.

Even when distress is general and a large number of the population want employment, the number of inefficient men need not be large?—It quite depends on the intensity of the famine. It need not be very large, and I think piece-work would be quite suitable.

Can you say from what you saw in Bihar, that piece-work might have been carried on throughout the famine?—Yes, I think so. I would prefer to give a note on the subject as it requires consideration.

If you have piece-work as the main form of relief, do you think economy is secured?—Yes. Fewer people will come on to the works as people do not care to bring their wives and children on to them.

The average earned by each man would be larger?—Yes.

You say that a large number of people were quite satisfied to draw the penal wage?—That was during the early part of the famine, but my information regarding this is on hearsay.

Can you say whether the figures of outturn of work are right or not?—I think the figures seem high if people were really content with the penal wage. I can say that at first measurements were not correct.

Possibly the measurements for February were wrong?—Yes.

This scheme which you refer to in answer to question 114 would not be possible in Bengal under the present system?—We absolutely could not do it, with the present strength of the Public Works Department.

Had the District Engineer been left with the Collector, would he have been under any professional supervision, or would he have been entirely under the Collector?—He would have been entirely under the Collector, subject only to the general professional supervision of the Inspector of Local Works.

Then as to the amount of control the Collector should exercise, if the works are carried on by the Public Works Department. Is it not the case that the works are primarily for the object of affording relief and not for the works themselves?—Quite so.

Is not the Collector primarily responsible for seeing that the relief given is adequate and reaches the proper persons?—Yes.

Under your scheme would the Collector always be able to discharge that duty and to ascertain whether the relief is sufficiently given or not. By giving the executive control to the Public Works Department, can the Collector exercise entire responsibility?—Yes, I think so.

You had experience in the Central Provinces?—Great experience extending over many years.

Had you any difficulty in dealing with the aborigines there?—None whatever.

They were difficult to get on to the works?—I have been amongst them for nearly 10 years and knew them very well, and I have never had any difficulty because they knew me personally.

Are they shy?—They are shy.

(*President.*)—We heard to-day, and once or twice before, that the result of the scarcity was not to raise the wages of labour in the private market but to lower them. Instead of the wages of labour going up they went down. Does not that make it very difficult to enforce the principle of the Government of India?—I cannot say I found it so. I found on the other hand that the contractors tried to get higher rates.

(*Mr. Bourdillon.*)—You said it was easy to draft agricultural labourers?—Yes.

(*Mr. Bose.*)—A missionary gentleman from Chota Nagpur said in his evidence that in the circle he was in charge of, the soil was mostly rocky soil and the people could not earn a sufficient wage even at the highest rate allowed by the rules. Should there be a specially favourable rate to meet such cases?—Yes.

MR. G. E. MANISTY, Magistrate and Collector of Bankura, called in and examined.

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I put in a written statement of evidence.

I propose to deal mainly with the case of not severe famine, in which, if no precautions were taken, the resulting deaths would be by hundreds rather than thousands—the actual case, in fact, with the Bankura District in the late visitation. Of the two points, efficiency and economy, I think we may consider we have now in Bengal acquired the art of effectually fighting famine somehow, and therefore I wish to deal more particularly with the economical side of the question. Again, as prevention is better and cheaper than cure, I will speak more to the diagnosing and warding off or postponing famine than to famine methods of work themselves.

I now proceed to deal with the categorical heads of the subject, as given in the Famine Commission's gazetted notice of 12th instant.

(a) *Departures from the Bengal Famine Code in the recent famine—*

(1) I need not dwell upon the substitution of piece for task-work sanctioned by Government itself, merely observing that in my opinion and in that of my District Engineer it was a most happy and necessary change; so much so that I would entirely abolish the old daily task and fixed wage system even for test purposes.

(2) My first experience of giving wages without work on a Sunday was so unfortunate in spite of precautions, that, seeing none of the relief works staff were Christians, I did not repeat the experiment.

(3) Owing to local circumstances I put off opening kitchens as long as I could, and when I did open them to meet Government's views (and in the case of Saltora centre on my own initiative for children's sake) I did not adopt all the minute instructions of the Bengal Code. Doing so seemed hardly necessary, and would have been expensive. Thus, food for both meals was cooked at once, and recipients, after eating what they could, took the rest home. It seems to me immaterial whether they there ate it themselves or gave it to others who needed it as much or more, and to keep them the whole day long hanging about the kitchens, with perhaps several miles to walk in the evening, did not commend itself to me from any point of view. In the matter of diet, again, I fear I did not give vegetables, spices and oil. As, however, people put on flesh while eating simply rice, dāl, and plenty of salt, the desired end was attained. The congee or rice water was in great request to mix with and moisten the rice. Of course the further prescribed items of diet would have been added if found really necessary. Finally, the establishment was cut down below the Code standard, but the results justified this departure from rule. In this, and in many other respects, I would suggest that the Code might well be made more elastic.

(b) *The degree of success attending measures adopted—*

(1) As to *relief works*, I believe our measures generally, which included earth-work on old and new roads, collection of stone metal by women and weakly men, breaking of the same, spreading and consolidation of laterite metal, and the excavation of a few reservoirs for irrigation or drinking purposes, were successful, and gave us on the whole our money's worth, the piece-work system being much more effective and requiring less establishment than the daily task and wage system. Several of the new roads were made as feeders of the future railway, and would before long have been absolutely necessary, famine or no famine.

(2) As regards *gratuitous relief*, the same may be said, *i.e.*, the measures adopted gave adequate relief and prevented avoidable loss of life, while at the same time conducing to economy. In respect of kitchens this has already been shown. Then as to money doles given to persons unable to work on roads or tanks, chiefly women and small children, with a considerable number of male lepers, I am of opinion that no more successful or economical method could have been adopted in this district. Constant inspection and supervision of payments by Government officers or District Board officers chiefly conducing to this result. Again, the system of money advances on joint and several security to artisans, on just the same lines as agricultural loans, were as far as tried quite satisfactory, and I know of no plan which could have excelled it, except that of requiring interest on the loans, which, however, is not sanctioned by the Code. Had I relieved weavers, I would have adopted this principle of money loans without interest, and have little doubt

it would have been more effective and economical than the local Relief Committee's plan of supplying thread and paying for the cloth made from it, the said cloth being sold at a loss, if at all, and not always given up to the Committee by the weavers.

(c) *Advice as to most effective measures in future famine—*

(1) For *relief works* I strongly recommend the piece-work system exclusively, calculations being made for each district by the Public Works Department as to the different rates of payment per 100 cubic feet needed to enable the minimum daily earnings in the test stage, and the maximum in the later stage, to be obtained by an average worker doing a hard day's work.

(2) For *gratuitous relief* I advise for districts like Bankura, with many aboriginal or very low caste inhabitants, such as Sonthals, Bauries, Bagdies, etc., the money dole system, worked under the strictest supervision through the most honest agency possibly available, kitchens being only opened as a last resort if in any locality the children are found not to thrive on the money doles. I believe in this respect Sonthals are the chief offenders as parents. In more civilised districts probably the cooked food system might be preferable. For all artisans, including weavers, not physically disabled from carrying on their usual callings, I would, as soon as it was found they could no longer support themselves in any way owing to the general scarcity, relieve them by a pretty free issue of loans on joint and several security at low interest. The supplying them with materials, buying and storing the finished product, selling it, and keeping material and cash accounts—all this means more petty agents for the purpose, which, again, unfortunately means more speculation, at least potentially, and greater anxiety for the superior staff, with, in my humble opinion, no adequate compensation; for to borrow money repayable with interest, under stress of a visitation of Providence, can hardly be regarded as demoralising to the artisans.

(d) *Other recommendations for future famines.*—In any consideration of this subject, it seems essential to bear in mind the general habit of private charity happily prevalent in this country, and the great desirability of fostering rather than discouraging the same. It seems reasonable to expect that, so long as the mass of the people are, even at some self-sacrifice able, so long they will be willing to give their mite to the afflicted and distressed among them, thus rendering gratuitous relief by Government unnecessary. Consequently we should devise every possible method, when famine threatens, to enable the people to go on as long as possible in the usual groove. Another all-important fact is that districts vary from each other enormously in many respects, and what measures suit one may be quite unsuited for another.

I. How better to know when famine is probable and when imminent.—Though much has already been done in this connection, probably a District Officer's most anxious time in a famine year is just when he is in doubt whether famine is really close upon him or not, whether by notifying it at a given date he may be blamed for precipitancy, or by failing to act at that moment, may risk some of the lives entrusted to him. Such at least was my experience in the month of May 1897, and such is likely to be often, with our present knowledge, the experience of other Collectors, seeing how frequently a district staff is changed. How, then, to increase the existing information for each district liable to famine, and for each part of that district? Plainly, an abnormal state cannot be correctly diagnosed, unless the normal state is thoroughly known beforehand.

(1) I would, therefore, propose collecting *more minute* information than we have yet for each district, thanna by thanna, not only as to natural features of the country and soil, the minor food-crops grown by aborigines or others, rainfall (there might be a rain-gauge at each thanna), the principal castes living there, and so forth, but also the economic habits of the inhabitants, *e.g.*, the normal extent of migration among them, the degree to which leprosy prevails, the extent to which, in normal times, they subsist on wild products, what those products are and in what months procurable, the system of agricultural labour, *i.e.*, whether labourers are kept all the year round and supported in times of famine by the employer, or are taken on by the day, whether paid in cash or kind or both, and the normal rates of such wages, how far rice-husking is a woman's profession and how far done by families at home, whether there is much or little room for improvement of agriculture by making tanks and reservoirs, reclaiming jungle or waste

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lands, etc., whether there are many or few landlords and substantial raiyats given to making such improvements, the general condition as to indebtedness of zamindars and raiyats. In the Bankura district most of the old zamindar families are hopelessly in debt now. These and similar matters should be systematically ascertained and results recorded in the interval before the next famine, besides the present statistics as to prices, wages, exportation and importation of food-grains in districts boasting railways, etc. Some of this information could be gathered from chowkidars on parade days, e.g., the number of migrants to other districts at a fixed period or periods each year. Inspecting officers of the Excise and Educational Departments might collect much more while on their ordinary duty, but probably some would require specially deputed officers of the Sub-Deputy Collector or Kanungo class, such as the exact area and normal outturn of special crops only grown and consumed by certain sections of the people.

(2) In addition to, and side by side with, the above data, all to be kept together in the Collector's office, monthly figures of bonds registered at each sub-registry office, monthly mortuary statistics, thanna by thanna, and perhaps quarterly figures of civil suits in each munsifi court, might with advantage be obtained and kept year after year. I found that bonds registered during the recent famine period exceeded the number in the same period of the previous year by 50 per cent, and that the number of rent suits was also much larger.

With the aid of the additional statistics above indicated, plus those already maintained, a District Officer would, I certainly think, be able much more readily and satisfactorily than now to form for himself a kind of *district danger signal code* by which to tell the approach of famine in any part of his district. Not only this, but he would also be in a far better position to prepare for dealing with distress when actually present.

II. *Preparation for famine.*—To be able to adequately and deliberately prepare for actually resisting famine when it comes, it is desirable to keep a record in normal times of those persons likely to need gratuitous relief during the calamity. The classes of these unfortunates are detailed in section 42, chapter V, Bengal Famine Code, being idiots, cripples, blind, etc. Now, the greater part of these are also separately enumerated in the decennial census returns, including lepers, a numerous and helpless body in this district at least. I would suggest that the enumerators' lists of all such classes of persons be preserved after each census, if by any means practicable, as also the names of professional beggars. The list should be kept village by village and union by union, as at famine time the union panchayats would probably be the agency for reporting distressed persons in the first instance. I consider the experiment would be well worth trying of making over these lists, when done with for compilation purposes, to the respective panchayats, with orders to maintain them till the next census by striking out names of persons dying or leaving the union, and entering new names as occasion required. Such lists, ready to hand, would prove very useful, in my opinion, and tend to prevent confusion and chicanery at the first onset of famine.

III. *Prevention or postponement of famine.*—From experience and observation, I am inclined to think that in future it should be possible to considerably put off the actual work of famine relief with all its paraphernalia for relief works and gratuitous relief. But to do this with confidence of course the minute local knowledge above indicated will be necessary. Every week thus gained means substantial economy and also the fostering of individual charity among the people at large. Fatal crop failures generally occur in autumn. Almost immediately after comes the cold season, during which works of agricultural improvement and all public works are in full swing. Prices of food do not reach their highest at once, nor cause general pinching except by slow degrees. If it be not possible to postpone relief works and gratuitous relief until the end of the cold season or, say, March, I would at least aim at trying the utmost to postpone it as long as possible. The following are some of the measures that suggest themselves for effecting this object.—

(1) As every rise in price after a certain point rapidly causes acute distress by preventing private charity, on anything like its usual scale, from acting, obviously any plan for keeping down prices must be highly useful. It is apparently hopeless to expect much success in this way, but still probably something could be done, in certain localities at least. I would suggest that, the moment

serious crop failure was certain, the Collector should by a printed letter, issued to all land-owners and grain-dealers, point out to them the position of affairs, and suggest to them that both for philanthropy and self-interest they might do well not to part with their stocks in haste for export, but store and add to them for local sale at remunerative prices later on. It would be strange if some philanthropic zamindars or other wealthy persons in each district could not be found to act upon this advice, and the presence of such stocks would have a healthy effect in somewhat keeping down prices in the neighbourhood.

(2) Another thing the Collector should, in my opinion, at once do is to address all the zamindars and substantial raiyats who are likely to respond, a list of whose names should have long been among the famine statistics in his office, asking them to take land improvement loans, unless they will use their own money instead, at 4 or perhaps 4½ per cent. interest, for improving their lands and so giving employment to the poorer classes. At present section 30(G) of the Bengal Famine Code directs the Circle Inspector or Charge Superintendent, after actual famine operations have begun, to try and persuade persons to take such loans, but in my humble opinion that is much too late in the day and the Charge Superintendent is hardly the best officer to succeed in the matter.

(3) In February or March following, I would issue agricultural loans freely, at the same interest, on the joint and several security of several raiyats. These advances, if made with ordinary discretion and honesty, are quite safe and readily repaid when good crops come. I prefer help at the threshold of famine to loans for replacing cattle, if necessary, at the end, because the former indirectly benefits the classes living by charity: besides, a famine only ends when a good harvest arrives, and then the raiyat can replace his dead or sold cattle out of his grain without any loan.

(4) A little later on, when the demand for their products began to largely cease from continued high food prices, I would issue similar loans, certainly bearing interest, to weavers and artisans generally.

(5) In prospect of a famine, the Public Works programme should be hurried on in or near the province affected, and earth-work of railways or canals be started, on ordinary principles, on cessation of the rainy season. Each Collector should be able to publicly notify in his district, every week or fortnight, where such works are being constructed, the kind of labour required, the shortest rail and road routes, with some information as to the prevalent rates and probable duration. Labourers and artisans migrating to these works might be carried by rail at reduced fares. Of course, works in parts not affected or least affected by crop failure would be preferable. Migration thither would reduce the pressure on the food-supply in badly affected tracts, as well as providing work for the migrants.

It seems to me that measures of the above kind would materially tend to postpone regular famine operations, foster private charity, and cause the minimum of interference with the ordinary daily life of the people. Substantial economy would thus result in various ways; less money would need to be unproductively spent on gratuitous relief in the shape of doles, less on famine establishment of all kinds, and the money used for the various loans recoverable with interest would prevent expenditure later on when famine could no longer be staved off.

(President.)—You were the Magistrate and Collector of Bankura all through the famine?—Yes.

When did the distress first begin to show itself?—About the beginning of May.

Had there been any failure of crops in the district itself?—There was a considerable failure of crops both in 1896 and in the previous year. It was the rice crop that failed.

How many relief-works did you have?—Not very many.

Were they on roads or tanks?—Chiefly on roads. I had only three or four tanks.

In charge of the District Engineer?—Yes, all in charge of the District Engineer.

You began with task-work?—Yes. I began with it and then changed to piece-work. We did not get on to piece-work till July.

Did the same class of people remain on the works whether it was task-work or piece-work?—Yes, but the numbers of women and children fell off.

Were the children generally supported by the earnings of their fathers?—Yes. I do not think they went on to gratuitous relief.

Do you think gratuitous relief was given according to the Famine Code regulations?—It was given strictly according to Code instructions, although of course some cases of undue leniency came to my notice.

Was gratuitous relief given in grain doles or cash?—It was given in money doles weekly.

What class of people attended the kitchens?—They were very low classes of people who could not work.

Did people who received money doles ever complain that they were not able to buy any grain at the quoted prices?—Very rarely.

In what part of the district did the scarcity chiefly occur?—A great deal of our distress was chiefly in the jungle tracts of the district.

Were there many aborigines on works?—There were Sonthals mixed with the other population.

Did the Sonthals come on the relief-works freely?—Yes.

Their women came with them?—Not so freely as of the other classes. A certain number came.

(*Mr. Holderness*.)—You do not think that the wives and children of piece-workers got gratuitous relief? Were there any measures taken to ascertain that?—I do not think that the wives and children of the piece-workers

got any gratuitous relief. Orders were given that such people were not to be admitted. A list of recipients was kept which was checked by the Superintendent.

The number of persons on gratuitous relief attracted the attention of the Bengal Government and they issued orders that cooked food should be given. Had you any difficulty in following those instructions?—I had no difficulty.

You opened kitchens?—Yes.

Did you then strike off people from the gratuitous relief list?—We kept on those who could not walk.

Had it no effect in reducing the numbers?—It sometimes reduced and at other times it increased the numbers.

Then you do not think that the kitchen is a good substitute for money doles?—No, I do not think that kitchens are a good substitute for money doles.

Is cooked food not a test of necessity?—Not in my district which has a very large population of low class people, and with them kitchens are not a test of necessity.

(*Dr. Richardson*.)—Are there many lepers in your district?—I believe Bankura is the worst district in Bengal for leprosy.

(*Mr. Higham*.)—Do you consider it necessary on introduction of piece-work to fix a maximum limit on the amount to be earned?—No. I do not think a maximum limit should be fixed.

Do you think that all the works should be close to the affected villages?—Yes, as far as possible.

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Mr. J. L. HEALD, Deputy Commissioner, Hazaribagh, called in and examined.

I put in a written statement of evidence.

I have the honour to submit the following note on the four points referred to the Famine Commission of 1897-98 for enquiry. These points are:—

- A.—Variations from Bengal Code in famine operations.
- B.—Degree of success in famine operations.
- C.—Suggestions for future famines as regards relief of distress and economy of working.
- D.—Other suggestions.

In Hazaribagh district distress showed itself in the month of October and November 1896, almost entirely among travellers on the Grand Trunk Road. Hazaribagh district separates Bengal Proper from Behar and Upper India. The Grand Trunk Road connecting Bengal and Upper India runs for 70 miles through the district. Every year the road is crowded with travellers, persons going in search of work, pilgrims, dealers and aimless wanderers, mostly proceeding from North to South in the beginning of the cold weather and returning in April and May. In ordinary years the travellers generally have enough with them to get along, though cases of emaciation and sickness are not unknown. During October and November 1896 it was noticed that the travellers were coming in greatly increased numbers, and that a large proportion of these travellers had exhausted their funds and were presenting an emaciated and enfeebled appearance. To meet the use of such travellers, feeding places, called "kitchens," were arranged for at intervals. These kitchens bore very little resemblance to the kitchen or the poor-house described in the Code. They were managed by local Committees. I found no difficulty in inducing respectable land-owners and shop-keepers to undertake the duty of arranging for the feeding of starving travellers. Those in want of a meal were collected in the morning under a tree if no shed was available. A calculation was made of the quantity of food required at a fixed scale for each class. The local Committee purchased the rice, dāl, etc., and had it cooked and distributed in the presence of one of their members. The travellers received one or two meals if they were without funds to purchase for themselves, and were then sent on their way. No expense beyond the actual cost of food, the wages of a cook and water-carrier, and in the case of large kitchens a mohurir for keeping accounts and daily lists was incurred. It is certain the managers made no profits out of these kitchens, there may have been a little peculation by the servants, allowing for all this, the kitchens are the cheapest form of gratuitous relief possible, and assisted many who were in an extremely unsatisfactory condition when they arrived within this district.

Some travellers were found to be seriously ill, dysentery induced by insufficient and improper food was the main

symptom. Arrangements were made to send those by carts to the in-door hospital at Hazaribagh town, where a large number of persons, not residents of the district, were treated—generally without success, as starvation dysentery seems almost incurable. I am not aware what arrangements were made on the Grand Trunk Road and other main roads of through traffic lying outside this district, but I advocate the extension of the above described system to all such routes.

I would further advocate the detention, and return to their homes, of persons found to have undertaken a journey without means to carry them through, and without a fair prospect of finding a source of income further on. I had no legal power to stop these aimless wanderers, and no sufficient justification to interfere and detain them, unless there was imminent danger of loss of life. All that I could do was to see they did not die of starvation whilst in this district, and assist them on their way with this object. Several were found to be returning, after an unsuccessful search for work, in a deplorable condition.

The system of kitchens, or rather feeding places, which was originally intended chiefly to meet the circumstances of the Grand Trunk Road, proved successful in dealing with the case of the helpless beggars and cripples who in ordinary years subsist for the most part on public and private charity. Owing to the short outturn of crops and the increase in the price of provisions, these persons found themselves deprived of their ordinary sources of food-supply. Kitchens were opened at centres throughout the whole of the district worked on the above system and managed by voluntary (unpaid) agency, and all the weakly and incapable specimens of humanity collected at these centres. The system was never objected to or adversely criticized by those who saw it in operation. It was proved that there were no caste or social prejudices against feeding at kitchens, provided there was no detention. The chief difficulty in fact was to keep down the lists, so that only the really unfit and those absolutely without other sources of food supply should be admitted. In its full development the kitchen system was the only form of gratuitous relief administered in this district to the extent of at least nine-tenths of those who received such relief. In the case of the remaining tenth the majority were receiving relief from charitable funds, public and private. The expenditure from Government funds on grain or money doles was quite nominal. The advantages of the kitchen system are its cheapness, the certainty that those in receipt of relief get a meal of wholesome food, and the opportunity it gives to invite respectable and public spirited inhabitants to join in the work of relief. I have not been able to discover its disadvantages in actual practice in this district. The system was copied by several zamindars who wished to assist their poor; and in Chatra town the kitchen was

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continued by the private subscriptions of traders and others, when public funds were withdrawn from it.

The third development of the kitchen system was in order to meet the difficulties in regard to famine relief arising from the peculiar circumstances of this district, circumstances which are absent from the plains districts. It is necessary to describe these circumstances at some length. In this district the failure of the ordinary grain crops does not, as in the plains, involve a total absence of food supplies. Another source of food supply is available. At least two-thirds of the district consists of jungle where large quantities of edible vegetable products grow wild. Some of these, such as the mahua fruit, are extremely valuable as food in every sense. Others may be compared to ordinary garden vegetables, forming valuable additions to the standard meal of flesh or grain. There is no doubt, however, that some kinds are not only not foods, but positively harmful if used by themselves or without a considerable addition of more substantial articles of diet.

It is probable that no one of these jungle products is by itself a perfect sufficient food for men; the great majority will involve physical deterioration unless they are supplemented by grain and other substantial food.

What happened in this district in June and later months must now be described. The small stocks of grains kept by villagers were entirely or nearly exhausted. The mahua crop, which is said to be nearly as good a food as grain, had been a failure to the extent of 8 annas. The demand for labour was reduced much below the ordinary demand for the season. The distress which had been generally slight in degree would now begin in the usual course to be more severely felt. To meet this distress, wherever felt, the people affected had the option of seeking work at the relief works or of satisfying their hunger by gathering edible jungle products. Unfortunately a very large proportion of the population preferred the jungle. With very slight exertion they could gather sufficient to satisfy hunger. The physical deterioration consequent on a food-supply of inferior nutritious value was too slight to be noticed in the case of the majority of adults. The evil effects on them were shown later on. An unusually sickly season prevailed among a population physically badly prepared to resist attacks of sickness. In the case of adults it was chiefly the excessive mortality among the poorer classes resulting from attacks of sickness, fever, dysentery and other bowel complaints, common to all classes during the autumn, that proved the debilitated physical condition of the population. Had the autumn been a healthy one, as the spring and hot weather were, the famine history of the Hazaribagh district might have been shortly described as proving the remarkable resources available to a population living in the jungles. The outbreak of sickness proved that these resources are to be regretted, and that it would have been unmistakably better for the district as a whole, if the distressed population had had no option between relief works and starvation. The evil effects were visible not only in the population which depended wholly on the jungles. It is certain that many, not in so great a degree of distress, were unwilling to purchase grains selling at comparatively exorbitant and repellant rates. They would have preferred their ordinary foods, but had strong inducements to restrict themselves to the less attractive but much cheaper foods available, and they were consequently badly prepared to resist attacks of sickness. I trust I have suggested some good reasons for thinking that the number on relief works at famine rates of wage earnings was a test that distress existed, but was in no sense an index of the amount of distress. The rice-eater believes he cannot live without rice; the inhabitant of Chota Nagpur has a range of foods varying from rice and wheat to jungle herbs and roots that pass through the stomach almost unaltered. The relief works were attended first by the labourers accustomed to work at earth cutting, to whom there was nothing unusual in attending such works for his daily food, and next, but to a minor degree, by persons reduced to the lowest standard of foods which they were willing to partake of, or persons who had no jungles at hand, with perhaps a few who recognised the danger of lowering the standard of living.

The above remarks apply more especially to the second point referred for report, but they were also required to explain the use made of the kitchen system.

It was found that although adults showed for some time no noticeable bad results from the inferior foods used, the effect was quickly visible on the children. In many villages where the people were admittedly living on jungle products to a great extent and had refused to attend

earth-works, the children were found to be in a dangerously emaciated condition. As one instance in point I would mention that after rejecting all who were old enough and strong enough to work in the strictest manner, it was found that there were over 1,000 children (and only some 30 or 40 adults) who required instant attention within an area of about 20 square miles to the south of the district. It was found impossible to induce the villagers to work even when work was provided close at hand; it was equally impossible to leave the children in their emaciated condition. The children had to be fed by public funds till the early *dhadoi* crop ripened; and some who had fallen into an emaciated condition were fed some weeks longer until their health was restored. Every possible inducement to work, short of a daily wage without measured task, which the people of this area demanded, was offered the villagers, but none except the few professional labourers could be induced to attend the works for more than a day or two. They preferred to pick jungle foods.

In discussing the kitchen system I have had to refer to most of the other forms of relief proscribed in the Code. I have now to make some further notes on the subject of relief works. Work was first opened in November and December in the localities where there were most complaints of failure of crops, as a test, at full rates, calculated on the Famine Code rates. They failed to attract the professional labourers even. These labourers preferred to work through contractors and objected to the various rules of the Code. Their action showed that they were not in any urgent need of help. Local funds were then saved up till the period when the distress among the able-bodied, if any, would show itself in March and April. In the meantime the Commissioner had ordered all works to be offered at low rates, so as to prove a test of real distress, and not at full famine rates.

A programme of works based on the ordinary road cess works over the whole district, with special arrangements for the tracts believed to be most affected, was drawn up. Village lists of persons (1) who were likely to be in need of work, (2) who were likely to be in need of gratuitous relief, (3) beggars and incapables, were prepared. This was no easy task in a district with a scattered population living in small villages, separated by tracts of jungle. Some work was arranged for close to every place where people said they were willing to work. It was soon discovered that there was no possibility of inducing people to go any distance from their homes. They preferred to take their chance of picking up a livelihood in the jungle unless work was available within a short distance of their homes. The number of places at which work was provided was, in proportion to the number expected to attend, and the smaller numbers who actually did attend, extremely large, and involved an establishment of road sirkars, munshis and pay clerks, which cost a considerable percentage on the total outlay.

The attendance was irregular from the first and made the gang system difficult to work. The gang system was gradually modified in the hope that people would attend in families by having a separate section of work for each family. Even this arrangement failed to attract workers: work on a road was continued till it had reached two or three miles from the village and then attendance almost entirely dropped. These facts would have pointed to the absence of distress, but other facts already mentioned proved that there was a lowering of the standard of living which was submitted to by the community affected. It was not possible to make them understand that this procedure was likely to prove disastrous to the community if persisted in. It depended greatly on climatic circumstances whether the effects would be temporary or permanently affect the community.

Arrangements were persisted in throughout the period of distress, and at any date within that period the number of workers could have increased fourfold without calling for any additional arrangements or establishment. Piece-work without restrictions as to task or compulsion as to gangs was offered. Daily wage was given not to the full extent of work done in all instances but to the extent of subsistence allowance daily, the balance being paid when the work was measured up, at interval of two to four days, by a trustworthy overseer. This was one of the modifications of the Code adopted when the number of works had increased so greatly as to exceed the available number of overseers who could be trusted. The overseer was placed in charge of several works which he visited at intervals not exceeding four days; meanwhile the daily subsistence allowances were paid by the subordinate who was in charge of each work, but who was not entrusted with measurements and final payments. The workers knew how much they had to do to earn the ordinary daily wage and rarely

exceeded that quantity of work. The result was that average earnings under the piece-work system did not greatly exceed what would have been earned under the strict Code system. Working with small numbers, it was possible to ascertain the circumstances of individuals more exactly than if there had been a rush of workers. I am convinced that the workers earned sufficient to support themselves in the ordinary condition to which they are accustomed, but I have formed the belief that they did not live very much better than their neighbours as regards quality of food. The standard of living was reduced. The sales of grains fell off, and the bazar dealers in cheap foods found a ready sale for their inferior stuffs. Of course no compulsion could be placed on workers as to the manner in which they spent their cash earnings. I believe reluctance to buy dear food even when funds are available, and there is strong preference for these dear foods, is a ruling factor to be considered in dealing with a population. If no cheaper (and inferior) food is available, the people will stint themselves only to a slight extent, possibly not at all; but when cheap foods are freely available, the temptation to select the cheaper foods is too strong to be resisted. There is the further inducement to people, naturally lazy and engaged on distasteful work, that by living temporarily on such cheap foods they can reduce the necessary amount of work to a minimum. The laziness of Hazaribagh cultivators and labourers is notorious.

These reasons lead me to believe that we would have probably been more successful in attracting the distress and been acting beneficially to the workers without discouraging them in any degree if, instead of paying them only in cash, a portion at least of the payments had been made in wholesome grains. I would carefully limit this expression of opinion as applicable only to districts like Hazaribagh. My proposal is opposed to the spirit of the present Code, which, however, allows the possibility of exceptional circumstances. I admit my opinion on this point was formed too late to suggest or take any action upon it during the famine operations. The severe outbreak of sickness drew attention to the matter. The manner in which the poorer classes flocked, when the harvest began, to the larger cultivators who offered, as is the district custom, grain in return for daily labour in the fields, could not be overlooked. It was evident the labourers found some special attraction in grain payments, although they could have earned at least an equal amount in cash value on the relief works. The death-rate during July to October was about three times the average rate. One-third represents the average, one-third is accounted for almost exactly by an epidemic of cholera, and one-third requires to be explained. It was due no doubt in part to the extremely unhealthy season noticeable amongst all classes. The number attacked by fever and dysentery, induced by the unusual climatic circumstances of the year, was probably as great amongst the non-distressed as the distressed. The percentage of mortality was undoubtedly much greater among the poorer classes, who are not usually more liable to succumb than other classes. This denotes impaired physique. The deterioration of physique was due to the action of the people themselves in preferring to risk the consequences of living on inferior foods. They could have avoided this risk by attending works where the only qualification required was willingness to work. These works were available everywhere, and the rates offered and actually earned were sufficient for the maintenance of the workers. The risks were too remote, the attractions were too slight, to induce people to attend the works. Looking to the results, I think the offer of grain in part payment of labour (though even grain might be afterwards exchanged to some extent for inferior foods, as was noticed in the case of gratuitous doles) would have been advantageous. It is also worth considering whether a certain degree of compulsion is not called for under exceptional circumstances. The villagers before referred to, in which many emaciated children had to be fed, were of course aware that the food which they considered sufficient for themselves was not wholesome for the children, but they could not be expected to estimate the risks that were being run. Some compulsion would have been of very great benefit to these villagers.

The Code contemplates the use of some degree of pressure in its provision of poor-houses, the picking up of the starving, etc. It nowhere affords any powers to famine officers in excess of the ordinary law. Action involving compulsion in the presence of immediate risk to human life would be justified under ordinary law. Action when the risks are more remote is not provided for, and cannot be undertaken until it is provided for.

As regards economy in relief working, I have pointed out that under the kitchen system the unremunerative expendi-

ture is reduced to a minimum. With the exception of a few paid moulhurrirs for keeping accounts and the unavoidable expenditure in wages of cooks and water-carriers, the whole of the amount spent on gratuitous relief went to the people relieved in the form of well-cooked food distributed at the minimum ration rate prescribed in section 99 of the Code. The charge for supervision went to meet the pay and establishment of three Charge Superintendents, who had under their charge all those kitchens in the district which could not be supervised by the ordinary district staff. In addition to kitchens, the Charge Superintendent looked after all other forms of relief.

As regards the cost of relief works, even although the establishments were excessive, the cost was not much greater than that which the district funds expend on similar works. There was an expenditure of Rs29,000 in amounts paid to the workers and Rs17,000 on tools and establishments, including the supervising agency. I have stated my reasons for thinking the latter sum was not an excessive expenditure. The district contains an area of 7,000 square miles. It was absolutely necessary to provide for all possible development of affairs. If the people had attended the works to the extent they should undoubtedly have done, the establishment charges would have borne a much smaller proportion to the total charges.

About $\frac{3}{4}$ ths of the work done will be of lasting benefit to the district. Regarding $\frac{1}{4}$ th, the work itself was useful, but it is feared the district funds will not be sufficient to maintain it in a state of repair.

On points C and D, suggestions for the future, I beg to submit a copy of my report submitted in reply to Government of Bengal letter No. 897T.R.—Fam., calling for suggestions as to revision of the Bengal Code. Many of these suggestions have already been noted in my previous paragraphs.

I have the honour to submit the following report, called for in your No. 1040F., dated 25th November 1897, forwarding Government No. 897T.R.—Fam., dated 10th November 1897, with reference to the revision of the Famine Code.

The enclosures to that letter call for suggestions on the following points in connection with famine arrangements. I give the corresponding chapters and sections of the Famine Code against each head.—

I.—Organisation of Famine Relief Works.

(a) Classification and wages (Chapters VI and VII).

- (1) Mr. Higham's new classes (62).
- (2) Rates of wages (104).
- (3) Abolition of distinction of sex (104).
- (4) Proposal for a standard task (65).
- (5) Increase in rates when no Sunday wage to diggers and carriers (70).
- (6) Increase in rates to diggers with Sunday wage when the number of carriers is excessive.

The following also come under this head :—

- (7) Question of daily payments.
- (8) Gangs and gang payments (63) (64).

(b) Comparative piece-work, task-work, and contract works (52).

(c) Programme of works [Chapter I (5) and Chapter VI (53) (55)].

(d) Agency [Chapters III (22), VI (54) (57), VI (89 to 97)].

(e) Accounts [Chapters III (26), XV (199), VI (85)].

II.—Gratuitous relief [Chapters IV, V, IX, X (141)].

(a) Kitchens [Chapters IX, VI (83)].

(b) Grain doles } [Chapters V (43) (44), VI (84)].

(c) Cash payments } (84).

(d) Relief to respectable families in towns [V (43), X (141)].

III.—Poor-houses (Chapter VIII).

(a) Periodical revision of inmates.

(b) Periodical drafts to native districts.

IV.—Orphans [Chapter X (146) (147)].

V.—Weavers and artisans [Chapter X (142-5)].

VI.—Other suggested alterations in Famine Code, Chapters 1, 2, 3, 11, 12, 13, 14, 15.

Mr. J. I. Herald. This report will deal with these subjects in the order above given.

I.—Organization of relief works—

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(a) (1). Mr. Higham's new classification proposes to change the present classification of four male, four female and two children's classes into practically two classes of male and female adults plus one class of children. His class X, which is to consist of those with superior abilities who could not be attracted to relief works at Y rates, may be eliminated. It is not understood by any officers using the Code that they are prohibited from engaging persons necessary for the furtherance of a relief work, except at subsistence rates. The persons named by Mr. Higham are either compelled by distress to come on relief works, in which case they are entitled to no better treatment than others because they happen to be well accustomed to digging or hewing, or they are not so compelled. Under the latter alternative if their assistance is required they must be offered reasonable terms depending on circumstances. There is no doubt that a certain special staff is required who may be selected from both classes, viz., the distressed and non-distressed, as found most convenient. The enquiry into the degree of distress of such indispensables, mates, kahars, expert hewers, need not be minute. For the same reason their wages need not be regulated by the Code. They will probably generally consist of promoted relief workers, and hence they will rightly be included in returns, but whether they are to get 2 chattaks or 4 chattaks above the ordinary famine wage may safely be left to local officers. Their wages will probably not be uniform, varying from little above the Y wage to perhaps double that wage. It is much better to show them as unclassified workers rather than X workers, which would imply a fixed ratio of wage between them and the Y and Z workers.

Dealing only with Mr. Higham's Y and Z classes and the children (which I shall call K class), I fully agree that experience everywhere shows the former sub-division is unnecessary and complicated and of no practical benefit. I would agree with everything Mr. Higham says as to the complicated returns, the incorrect figures, and the impracticability of any fair comparison between district and district and province with province, as regards net result of operations under the Code system. Mr. Higham points out that there would be no advantage (except convenience) in any classification if the wage corresponded with the output of work. I agree with this, but I believe that for the same maximum sort of work side by side the fixed maximum output and the fixed wage can and ought to agree with the classification, i.e., the full task for a Z worker, who is required to dig instead of carry, should be $\frac{2}{3}$ of a Y worker's task, and his daily wage $\frac{2}{3}$ of the wage of a Y worker. Mr. Higham suggests only $\frac{1}{2}$ Y task digging for Z workers, but this seems too low: if the figures in table at page 80 of the Code are fairly correct, the majority of Z workers will be women of the B and C classes who can do $\frac{2}{3}$ of the work of B males. There is nothing at all difficult in arranging this. Mr. Higham practically admits the possibility of such an arrangement in the case of a Y worker acting as carrier. He insists on an additional 50 per cent. ($Y=1\frac{1}{2}$; $Z=\frac{3}{2}$, or $Y=150\%$ of Z), and his proposed rates of wage closely bear out this contention (see further on). I would therefore suggest the classification Y, Z and K with $Z=\frac{2}{3}$ of Y and $K=\frac{1}{2}$ of Y under every circumstance of task work and wage.

I (a) (2). Closely connected with classification is the subject of rates of wages. Mr. Higham's proposals to include weakly men with women as carriers (i.e., the Z class) will result in a loss of one chattak in one male minimum wage, but will be still sufficient for support, and will accord with the experience of the present famine, which certainly proved that all classes of workers were not under-fed, but if anything better off than usual in the matter of meals. It is also pointed out that the number of men in class Z will be small, in fact most men will be drafted into class Y to provide diggers for the female carriers, and such weakly diggers will earn a minimum wage.

The proposal to allow children over 12 to rank with women and weakly men as Z workers is doubtless the result of experience, and I have no facts to urge against it. I would, however, venture to think that if a child of 13 eats 13 chattaks, a child between 11 and 12 should be able to eat something over 8 chattaks. The exclusion of all but very sturdy children under eight or nine from tasks in practical working of relief works is to be advocated on many grounds, and for this reason I would suggest half a Y wage as a suitable wage for a child supposed to be between 7 and 12 years

I have now to suggest a slight amendment to the rates of wage proposed by Mr. Higham for the purpose of simplifying the accounts and calculations at slight (if any) cost.

Y wage I would fix at 19½ instead of 19 chattaks.

Z " I would agree to fix at 13 chattaks.

K " I would fix at 9½ chattaks.

The wages would then bear fixed ratios to each other; Z would be $\frac{2}{3}$ of Y, and K would be $\frac{1}{2}$ of Y.

Taking grains at 6 to 12 seers the results would work out—

	6 Srs.	7 Srs.	8 Srs.	9 Srs.	10 Srs.	11 Srs.	12 Srs.
Y	33	29	26	23	20	19	16
Z	23	19	19	16	13	13	10
K	16	13	13	10	10	9	9

I have taken nearest pice and not nearest lower pice in case of pice. The variations in the actual payments so far as they represent gain or loss to the labourer, are generally favourable to Code rates, i.e., the tendency is to reduce Y workers to slightly less than 19½ chattaks, to increase Z slightly over 13 chattaks, and to appreciably reduce K wages below 9½ chattaks.

There is another scale I would suggest for consideration, which combines Sunday wage (without labour) with the actual week's work. This is only in accordance with the practice of the late famine. It is better to give a Sunday wage to six-days' workers and to place new comers on the gratuitous list for the first Sunday. Under this system the rates would be—

	Chattaks.
Y=22½ chattaks for 6 days	= 135
Instead of 19 for 7 "	= 135
Z=15 chattaks for 6 "	= 90
Instead of 13 × 7 "	= 91
K=11½ chattaks for 6 "	= 67½
Instead of 9½ for 7 "	= 66½

The differences are within allowable margins. The workers may be safely trusted to look after their own interests for the compulsory day of rest, when the necessary funds are provided.

I (a) (3). I agree with Mr. Higham that there need be no distinction between payments to men and women for the same class of work when that work can be equally well performed by either men or women, such as carrying earth. Women would always be treated as Z workers if employed on digging.

I (a) (4). Mr. Higham proposes a codal standard task for Z workers. I do not see any urgency in this matter. It can be taken up when a famine next occurs. It is hopeless to expect agreements among different experts and authorities in such a matter.

I (a) (5) and (6). Mr. Higham proposes certain allowable increases in earnings under the task-work system. He suggests that with Sunday wage (either special or distributed, I understand) diggers may be allowed to earn extra to keep an excessive number of carriers employed, and that when there is no Sunday wage the diggers and carriers should both be allowed to earn increased daily wage. I advocate a distributed Sunday wage, and discuss only the latter proposal. I think that the proposal loses sight of the self-imposed obligation of Government to keep the people from hunger, but not more than this. In task-work the interests of every member of a family are provided for so far as hunger is concerned, and there is absolutely no reason why the workers should get an iota more. Additional earnings should be allowed only in piece-work where a larger number of persons are relieved by the earnings of a smaller number of these persons. It should be left to private charity to deal with the future of the famine worker; the whole theory of famine relief depends on this. I would only suggest that the day's task need not be done day by day. If a double or treble task is done in one day, the labourer or gang may get wages to correspond, but must not be allowed to earn more till the time covered by the work has expired. This gives him an impetus to work hard and guarantees his food whilst leaving him an opportunity for looking after his private affairs. He may want to go to his home occasionally for a day or two, by the above suggested means he can afford to do so.

I (a) (7). Daily payments are undoubtedly the best when they can be arranged, but they need not be the exact daily earnings. The supply of rice or flour is generally bought daily; other ingredients of the diet at less frequent intervals. If daily payments involve too great cost or too

great a strain on the superior establishment, there is no hardship or risk of loss in allowing payments in part, say $\frac{1}{3}$ of the maximum limit of earnings, to be made daily, and the account to be made up at intervals of a few days by the superior officer when he tests. Thus the gang of 16 entitled to $1\frac{1}{2}$ annas daily for full work may be paid 1 anna daily by the petty officer, and the balance due paid when the work is tested by a superior (trusted) officer, at short intervals. They are entitled to at least the 1 anna as a minimum or penal wage; this amount will provide them with the day's rice or flour, and they will have a supply of other ingredients purchased at the previous making up of accounts. It was only by this system that I could manage a large number of works with a small trustworthy establishment without leaving this establishment very much at the mercy of the subordinates, mates, etc., for measurements and daily lists.

I (a) (8). The question of gangs and the payments to gangs gave me more trouble than all other details of relief works. My opinion is in favour of relaxing the obligation to work in gangs to the utmost extent compatible with proper supervision and regulation of the relief work. Jealousy and friction are the inevitable results of mixing up strangers in gangs; and this is sometimes the case in gangs of fellow-villagers or fellow-kinsmen. I am also strongly of opinion that although the pay clerk to save time may pay out in gang-earnings, it must always be in coin that can be divided among the members of the gang according to their individual earning, and that the division be insisted on before the gang leave the muster ground, unless with the permission of the officer in charge. Any improper conduct is thereby at once brought to notice and checked by fining the persons in fault.

I (b). *Task-work, piece-work and contract work.*—Various arguments for and against the adoption of each of these methods of work and the circumstances under which one system would be preferable to the other, have been fully stated by Mr. Higham. I agree generally with his opinions. In task-work we look after every individual: in piece-work we trust one individual to look after the interests of several others for whom we calculate in our dealings with the first individual. It is not irrelevant in this connection to suggest that the supervision may be unnecessarily elaborate and costly in the case of task-work; whilst, on the other hand, a great deal of individual hardship may occur in the piece-work system. In task-work the relief worker knows that he and his dependants live by the day and for the day. The wage in money represents so much food which he knows he is expected to eat. The ideas of profit and saving (including frugality) are almost entirely absent from his mind. In piece-work, profit and saving (especially frugality) may enter largely into the mental phase of the undertaking. The worker will not allow his dependants to starve, but he may unduly stint them, especially in foods the price of which has largely increased, even if these are the only foods available. The worker is reluctant to pay 4 annas for a seer of rice when he has never paid more than 1 anna 6 pies previously, even if he possesses the 4 annas by his earnings. He buys three-fourths of a seer instead of the full seer. I discuss only piece-work intended for the benefit of a number of persons in want in excess of the workers. Piece-work intended for the benefit of the individual labourer only is really work outside the scope of the Famine Code. It is not the ensuring of a subsistence, but no more, to the individual in want. This does not detract from the value of the piece-work system as a work in aid of a distressed community. And there may be many cases in which it is better to substitute for the theoretically perfect system of task-work a practically fair and efficient system of piece-work. Factors to be considered have been stated clearly by Mr. Higham, (1) the difficulty about accounts and about a subordinate staff, and (2) the great cost of task-work in proportion to normal cost. I do not attach importance to the (purely temporary) weakening of the moral obligation to support dependants—high prices in themselves, as I have firm belief, weaken this obligation to a much greater degree—or to any want of elasticity and vexatiousness, as the famine operations in Behar have proven these grievances are not very formidable; indeed they may be overcome by allowing the gang reasonable liberty to work only every alternate day or week, doing double task and getting daily or weekly credit for the whole work done.

In this district piece-work has prevailed throughout the operations, and I think properly so for various reasons. First, with a thinly populated but very large area to deal with, under the task-work system establishments would have cost an enormous amount, possibly more than the relief wages. Second, the distress was never so great as to drive

a large proportion of the population to relief works, and even those relief workers were in the majority of cases not absolutely dependent on relief works, *i.e.*, they had another alternative source of food-supply. Third, and not least important, the alternative source of food-supply, namely, the jungle products available, was of so deleterious a quality as a food that it amounted to slow poisoning, or tended to weaken the system, so that every possible inducement to the distressed to attend relief works was of direct benefit—such inducements as freedom from strange and therefore vexatious rules and restrictions, and a fair rate of earning. Piece-work has not succeeded in securing the attendance of all those who should have attended works in this district. Task-work would certainly have been still less successful.

I have given this district as an instance, but I do not venture to lay down any fixed principles which should guide in deciding the difficult question as to the practical advantages of piece and task-work. I should always commence with piece-work and await developments. If the payments in piece-work include a percentage of such payments which do not go to relieve distress, but are “profits” to the labourer, it is equally true the payments in task-work (especially for establishments) include a percentage of unproductive expenditure. Local indications will generally be sufficient to show when piece-work is insufficient, but this will be evident by observation not only of the workers, but of their households, and therefore I think it is hardly a matter the Engineering Department can decide on.

I do not believe contract works a possible form of relief; they can only act as works in aid of a slight degree of distress and even then only by treating the contractors as more or less resembling overseers in their duties, and not by allowing them a free hand to choose or reject applicants for work, as they generally do.

I (c). *Programme of works.*—I agree with what is said as to the advisability of very full programmes, and think the Code should be modified in the direction indicated by Mr. Higham, but I hardly think that the present famine has exhausted, or the next future famine will exhaust, the number of possible small (village) works. Tanks require re-excavation and cleaning. New tanks or reservoirs are required almost everywhere. Village roads are generally disgracefully bad.

I (d). The question of agency is hardly left for discussion, as the Government Resolution rules that the principle laid down in paragraph 130 of the Famine Commission's report must be adhered to.

As regards the formal delegation of powers to departmental officers, I can suggest nothing from the experience of relief work in the district. Except the mechanical measuring and payments, every operation was conducted under my written instructions—many on matters of detail which I should have been glad to leave to the judgment of an engineer (had one been available) without weakening my own sense of personal responsibility. I think the departures from the Code procedure were more apparent than real, at all events in Bengal. Mr. Higham tends to confuse a procedure, the result of a direct interference and instruction by Government or by the Commissioner in a district relief system, with a transfer of power (with or without its attendant responsibility) from the District Officer to the Public Works Department Officer.

I (e). *Accounts.*—It has been a task of the utmost difficulty to compile famine accounts in this district, because the available number of clerical subordinates is very limited. I have gone through Mr. Higham's proposals in Appendix II. They seem very simple and based on true principles. To work up from the daily report to the provincial abstract in a practically identical form for every stage is likely to reduce risk of error to a minimum. I think that in daily reports the columns 6, 7, 8, and 9 (Works Abstract, Part I) should be perpendicular and not horizontal.

II. *Gratuitous Relief.* (a) *Kitchens.*—In this district 95 per cent. of the gratuitous relief administered from local and Government funds has been given in the form of kitchens. Kitchens were first opened to provide rest-houses for travellers under section 39 of the Code. Then they were started to check the expenditure administered through the police, who could not in all cases be trusted to feed the casual cases of distress or to confine expenditure to genuine cases only. Careful enquiries were made, and it was proved in a short time that there was no reason to fear that persons in want would refuse to attend the kitchen, preferring starvation. The number of kitchens was therefore largely increased, and all those unable to work placed on the kitchen lists. The kitchens were also most useful in dealing with the unfortunate children of those able-bodied

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parents who refused to work because they could gather a meal in the jungles with slight exertion. The grown-up could stand such food for some time, but the children were unable to digest it. Some kinds of "sags" largely consumed, passed almost unaltered through the stomach, and children quickly became emaciated. The kitchens were entirely under non-official supervision, except a few which had to be placed under a police officer. A respectable leading inhabitant was appointed as Secretary, and a small committee was formed to attend in rotation. The Secretary generally attended every day, and placed new applicants on the lists of persons entitled to a meal. The persons treated were inspected at frequent intervals by the Charge Superintendent, and it is believed the amount of peculation that occurred was very trifling. In one or two cases the cooks secreted a little dry rice with the intention of removing it, but the inmates could not notice the slight deficit in their doles.

The kitchen lists were drafted from the village lists and contained only—

- (1) all children in an emaciated condition (till recovered);
- (2) children who had no one able to support them ;
- (3) idiots and lunatics ;
- (4) cripples, blind ;
- (5) those too old or too weak to work.

It is certain from the small attendance of adults and the scrutiny of the lists that no able-bodied persons fit for work received more than two-meals. Two meals were allowed to relieve present hunger, and the person, if fit for work, was then removed from the list.

The kitchens were much simpler in routine, and less elaborate arrangements were made than those described in Chapter IX.

In the hot weather no shed was required : in the rains a hut was found available. The food was eaten from plantain or other leaves, which were gathered fresh for every meal, no waiters were required ; the members of committee looked after the interest of all.

The kitchen is the simplest form of gratuitous relief which can be devised. It reduces accounts and work to a minimum, and it can be managed, with the assistance of the villagers themselves, by a few officials. I do not suggest that *parda* women should attend public kitchens, but every one else, no matter of what degree or caste, if physically able to attend, should be compelled to choose between the kitchen and the poor-house.

II (b). *Doles and cash payments.*—As I have said, I am strongly in favour of cooked food doles in kitchens for the distribution of gratuitous relief to those mentioned as eligible in Chapter V, and have pointed out the exceptions, which are *parda* women and their small children, and those physically weak and therefore unable to attend the kitchen.

I think money doles should be given only in extreme cases ; when money is given it is almost certain that the amount is not properly spent ; the most wholesome food is not bought, and, if bought at all, only in small quantities, because the price is itself a strong deterrent to the expenditure of the money dole on such "dear food." Hardship to the individual recipient is almost the only reason why he should get a money instead of a food dole. Even if the caste or other prejudices prevent the acceptance of grain doles, the dole need not be money ; a "credit" on the shop-keeper who will be repaid can almost always be arranged. Any arrangement is better for the recipients of relief than tempting them to misapply money (by buying unwholesome food) or to exercise undue economy owing to their aversion to pay exorbitant prices for their daily food.

II (c). *Relief to respectable families in large towns.*—On this point I have no experience. I should suggest loans as the most suitable form of relief.

III. *Poor-houses.*—No poor-house was opened in this district till near the close of operations.

The poor house was intended to relieve abandoned children and orphans, and also beggars, when the period of acute distress among all other class had passed but the ordinary sources of charitable relief were not re-opened.

I think there should be larger use of poor-houses than under the present system. I have already mentioned that in this district the people preferred unwholesome food instead of wholesome food, which involved work at relief works. The risk to the people themselves was not appreciable at the time. They satisfied the pangs of hunger for the day, and the physical deterioration was gradual. However, when some months passed and an unusually sickly season

as regards fever and bowel-complaint followed the healthy months of May and June, the evil results of this pernicious food were at once apparent. The people attacked by illness were unable to resist the attacks. The death-rate, independently of cholera, was almost double that of the average for the season, instead of the moderate percentage of increase which was anticipated from the unfavourable symptoms. The Code in several places refers to coercive executive action, but nowhere lays down any power possessed by any one to compel persons in want to submit to such action. I can use "unlawful" means to succour persons in fairly urgent distress, on the ground that no reasonable person would object to the use of force under the circumstances. The case is different when the disastrous results of a procedure are remote although almost certain to ensue. It was known that children fed on "sags" and jungle roots by their parents would deteriorate in health. With a proper admixture of cereals the "sags" might be wholesome, but not so if they composed the whole of the food. I had no power to compel the parents of these children to come to the works either for their own benefit or for the children's benefit. The deterioration in health of the parents hardly ever reached the stage for using pressure. In the case of the children thousands had to be fed, whilst the parents sat idle, because the children were dying of slow starvation and became in urgent need of relief.

I am strongly of opinion that some penal clauses are required for such extreme cases of stubbornness and stupidity. The powers would seldom be used, especially when, as in most districts, the failure of one crop leaves no alternative between work and immediate starvation. To force persons answering to the description just given into a poor-house until they consent to work for themselves and their families is a power which should be available in time of famine, chiefly because it will hardly ever be required ; the mere threat (with ability to carry out the threat) will be sufficient.

Aimless wanderers thronged the Grand Trunk Road in much larger numbers than usual. It was found necessary to provide a kitchen for these persons at the end of each day's march. Many, however, were found who had arrived on the borders of the district in an extremely debilitated condition. They had to be sent into the Sadar dispensary, where many died from dysentery. A poor-house was the best arrangement for such persons, both healthy and sickly. It was well known they would not improve their prospects of a livelihood by proceeding to the over-stocked labour resorts further down.

A power of detention similar to that possessed by the local poor-house or work-house authorities in Britain is required for dealing with famine in India, and is possibly required in ordinary years in a district like Hazaribagh, where it is believed by the Civil Surgeon some persons got insufficient nourishment in the best years.

The weeding out of poor-houses could be arranged by introducing disagreeable labour, such as stone-breaking and aloe-pounding. Transfers to the native district can be arranged by executive order. Poor-houses are not voluntarily places of refuge in the sense implied in the Government of India Circular (paragraph 6). They are peopled by the persons picked up by patrols, or by malingers from the relief works, and it is very certain they will be more required in future (because the dangers of neglect are better known) and call for legal sanction.

IV. *Orphans.*—I think the present provisions regarding orphans are fairly sufficient. The difficult question, as to the power of parents or relatives to claim orphans after they have been reared to a certain age at Government or private charitable expense, may be met by allowing the Government or private charitable institution or the District Board which took charge of the orphan a lien on the child until it has been compensated for the past expenditure or satisfied in some less costly manner. The arrangement comes rather within the scope of the Civil Court, unless special laws are passed by Government.

V. *Weavers and artisans.*—The case of weavers in this district, who were the only artisan class involved in the general distress, was arranged for in connection with the scheme of charitable relief. The charitable funds were largely applied in saving women of respectable classes from the degradation of attending Government relief works (seath-works). These women were provided with cotton-spinning. In order to convert the thread thus produced into cloth fit for another stage in the scheme of relief—the clothing of the destitute—weavers in distress were employed in this work of weaving instead of being referred to the Government relief work. By this procedure, which was

in itself very profitable to the fund, inasmuch as every rupee in original outlay produced relief or assistance worth more than one rupee in the shape of increased value of the products, all weavers in distress were fully employed.

I think clothing for the destitute is not an insignificant item in the saving of life during famine, and should find some mention in the Code. It is possible that charitable funds will not always be forthcoming. I suggest the above procedure as likely to relieve weavers and meet the clothing question, which is not reckoned for in the allowances fixed for "daily tasks."

VI. Other portions of the Code not touched on in above notes, which require notice, are very few.

Persons employed in relief operations should be declared public servants.

The post of Charge Superintendent should be defined and described in Chapter IV.

State and guaranteed railways should be required, if possible, to carry grains intended for relief areas at reduced or nominal rates.

Treasuries should similarly be empowered to give grain-dealers bills of exchange on the wholesale centre treasury free of charge.

The coercive powers of famine officers are throughout assumed in the Code. Some attempt should be made to define them and convey legal sanction to them.

(*President.*)—You were in Hazaribagh all through the famine?—Yes, I have been nearly two years in the district.

What was the first kind of relief you gave?—Some kitchens were opened early on the Grand Trunk Road.

Were they met from Government funds or charitable funds?—At first from charitable funds, but when numbers became large from Government funds.

What was this charitable fund?—We had Rs500 of the old fund and we then collected private subscriptions.

Old fund: what do you mean?—The former famine fund.

Do you think that in ordinary years there are many whom you may call aimless wanderers?—Yes, large numbers.

Living on charity?—Yes, to a certain extent; some appear to have funds.

A kind of semi-starvation?—We noticed that people in a semi-starved condition commenced to appear so early as October or November.

How many kitchens had you in the Hazaribagh district?—We had about 40 kitchens.

Did children come to the kitchens?—Over half were children.

Did people of superior caste come to the kitchens?—There are very few of superior caste in the district who would be affected by distress. They are mostly landowners. I found some Brahmins and Kayasts attending the kitchens. They were beggars.

Were these people from the jungle districts? Were they Sonthals?—No, they were not jungle tribes but low caste Hindus, such as Kurmis, and some Mussulmans. The jungle tribes seemed to have more powers of resistance.

Had you many works?—We had some 40 works. We never had the same men continuously. They came and then went away after a few days.

(*Mr. Holderness.*)—You never had more than about 4,000 people on the works?—About 3,000 is the highest daily number.

That was on the 40 works?—Yes, spread over 40 works.

Was the whole of the district distressed?—About 2,000 out of 7,000 square miles suffered keenly. The shopkeepers said that people would not buy rice, it was so dear Rice sold at 4 seers for the rupee.

What did they buy?—They bought makai and mahua and other cheap foods, and also largely from those who sold vegetables and jungle products in the *kats*.

Up to July the health of the district was good?—Yes, exceptionally good.

After October was it bad?—I think November was fairly bad.

Did you find many starvation corpses?—No, I had strict patrol on the Grand Trunk Road to look out for them, but I never found dead any who had died from actual starvation. But we found some people hopelessly reduced. The mortality in the rains was chiefly due to dysentery.

Then apparently people would not attend works continuously even under the best conditions?—They were unwilling to attend even on the best terms which were offered. They wanted the daily rate without measured task.

How many kitchens had you in the district?—We had 47 kitchens—five along the Grand Trunk Road and the others throughout the district.

Was the supervision of these kitchens satisfactory?—The managers took very great interest in the work. I think the supervision of the kitchens was much better than could have been anticipated.

Who were the managers?—The petty zemindars in the district and also some shop-keepers.

Was there any caste prejudice?—We had travellers of almost every caste on the Grand Trunk Road and no one objected on the score of caste to kitchen food; throughout the district there was on the whole not much objection to cooked food. The people grumbled but did not refuse to eat the cooked food if in real want.

In ordinary years would these people take cooked food?—I think they would do so without prejudice; it is not much of a test in Hazaribagh, the people being of a very low class the kitchen is not much of a test.

(*Dr. Richardson.*)—I see the excess in mortality was due to cholera?—Yes.

What do you suppose was the cause of the cholera?—I cannot say, but I do not think it is connected with the scarcity.

Was there any connection with the water supply?—The water supply is very good.

Were not any special measures adopted, such as permanganate of potash, etc.?—We distributed that very largely.

(*Mr. Holderness.*)—Had you any special staff for inspection throughout the district?—We had Charge Superintendents. We had no Circle officers. The Charge Superintendents were two European and three native officers.

What was the channel by which you found out that the people were very badly off?—Information through the police and information through the landowners.

Mr. H. FOSTER, late Charge Superintendent of Kessaria, Champaran, and Debogram, Nadia, called in and examined.

I put in a written statement of evidence.

I was ordered to Behar on famine duty on 14th December 1896, and took charge of Kessaria Charge, in Champaran, on the 30th January 1897. The charge was in area and population as follows:—

	Area, sq. miles.	Population.
Part of Kessaria thanna . . .	171	116,000
Whole of Madhuban . . .	129	109,542
Total Kessaria Charge . . .	300	225,542

I had eight relief works under me by the month of May—seven tanks and one embankment. I had to lay out three of the tanks myself. There was one Public Works Depart-

ment embanked road work in North Madhuban (Jugowlia). My relief work figures showed an attendance of about $\frac{1}{4}$ th of the population, and my gratuitous relief ran to $\frac{1}{25}$ th of the population. (These figures are not exact, and refer to the most acute period.) I was ill for six weeks out of the four months I passed in Kessaria Charge. The relief works were done by the pit-gang system, after the individual task system was found to lead to fraud, untidiness in work, and slow progress. Gratuitous relief was distributed by nine planters, who proved very efficient Circle officers. I also had three paid Circle officers.

It has been my experience that it is much easier to prevent starvation in Behar (Champaran) than in Bengal (Nadia).

However, the period when I left Behar was the end of *Jasist*, *Asar* and *Srabas* were stated by the people of my Behar

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Charge to be the critical months. I started work in Nadia in earthquake week (June 12th), and was at first sent by the Collector on general inspection all over the affected parts of Nadia. But I was afterwards ordered to take over charge of Debogram, Nadia. From the 14th July to the 30th September I was actively engaged as Charge Superintendent of Debogram Charge. I had no superintendence over relief works.

Area and population as follows:—

	Area, sq. miles.	Population.
Tehatta thanna	180	87,121
Kaliganj	109	46,000
Part of Nakasipara	11	6,000
Total Debogram Charge	300	139,121

My charge consisted of about 190 square miles of (mostly) low-lying *dhil* land, producing winter rice, and depending entirely on an annual flooding from the river Jalungi and called the Kalantor. When the floods fail, the crops fail. The rest of my charge is higher land, but sandy and unfertile.

Mr. B. C. Basu, who inspected these parts, reported that the crops had failed for two years together.

The estimated outturn of the immediately preceding crops were as follows:—

	As.
1896 <i>aus</i>	6
1897 <i>aman</i>	1
1897 <i>rabi</i>	5

The 1897 *aus* was 14 annas, and *aman* 16 annas.

The Kalantor is not an importing country. There are no rice merchants on a large scale. It is almost self-dependent.

On the lines suggested by paragraph 8 of Mr. Basu's Report on the outturn of crops in north-west Nadia (see Selected Papers on Famine, 1896 and 1897, in Bengal, Volume III, page 221), I have calculated the total produce (normal), total food requirements and total crop realized to be as follows. (I consider the figures important, as showing the serious position that this tract of Nadia holds in a famine. The figures cannot claim to be exact.)

Extent of Crops.

	Es Kalantor.	Kalantor.
	Acres.	Acres.
Winter rice	8,800	34,600
<i>Bhadoi</i>	59,600	5,000
<i>Rabi</i>	61,200	13,600
	129,600	53,200

Normal total produce.

	Es Kalantor.	Kalantor.
	Mds.	Mds.
Winter rice	1,05,600	4,15,200
<i>Bhadoi</i>	5,36,400	45,000
<i>Rabi</i>	5,50,800	1,22,400
	11,92,800	5,82,600
		17,75,400

Estimated actual produce (1 anna winter rice, 6 annas *bhadoi*, and 5 annas *rabi*)=4,60,950 maunds.

This may be reproduced shortly thus—

	Mds.
Normal total produce	17,75,400
Total food requirements (7 maunds per head per annum)	9,80,000
Total realised	4,60,950

These figures, inexact as they are, yet show what a serious matter a famine in Nadia may prove. The following facts aggravated the distress and increased the difficulty of dealing with famine in these parts:—

(i) The population suffers from malaria and floods (see Report on Census, 1891, page 88).

(ii) The silting-up of the big rivers has damaged, (a) the trade on their banks; (b) the chances of flooding in the rice crop season.

(iii) The decline of the indigo industry (in my opinion, still in progress in Nadia).

(iv) All the resident zamindars are small and comparatively poor.

(v) The *Urbundi* system leads to bad cultivation, an unsettled condition of the peasantry (encouraging emigration), and facilitates oppression by zamindars.

(vi) Emigration being thus encouraged, the less energetic part of the population remains. I could see little or no spirit of enterprise in the people.

(vii) No railways, bad roads, bazars isolated by *dhil* lands in the rains.

This last fact was a serious difficulty in this famine.

Besides the distress amongst the agricultural class,* there was still more marked distress amongst the Baisnabs, as well as the muchis, weavers, fishermen, and zamindari servants (palki-carriers, mehtars, barbers, etc.). The shop-keepers failed to reap their annual harvest at the *mêlas*, and even the prostitute class were in distress.

Thus, I think that though the Kalantor raiyat, in good years, lives better than the Champaran raiyat, yet in a famine year the Kalantor raiyat is worse off. In Behar, a village conflagration would display a surprising reserve of grain. In the Kalantor villages there was no reserve. The large bazars of Katwa, Saktipur, and Kaliganj, besides being greatly impoverished this year, are isolated from the Kalantor villages in the rains. I saw the villagers gathering *shyama* grass (a wild millet) in the fields in July in most villages. The following are the obstacles, therefore, to importation from outside into the Kalantor:—(i) isolation of the village bazars, (ii) want of enterprise, and (iii) want of capital.

Another serious difficulty is that Mahommedan women are not allowed (by local prejudice) to work on relief works. I am, however, strongly of opinion that if the means of importation are improved, and if a system of labour were in force by which the labourer could earn as much as he chose to for his family, these able-bodied women need not be admitted to gratuitous relief. I calculated that the gratuitous relief figures should never exceed 3 per cent. of the population. I cannot speak for the other figures (relief workers, etc.). Many Mahommedan women in the Kalantor were gratuitously relieved, who would not go on the relief works, and whose local bazars were not supplied with rice.

Another difficulty that occurred to me (but luckily it did not come to pass) is as follows:—

Only the starving are relieved. There are many one or two bigha raiyats, with perhaps a cow or two. These cannot be admitted to relief, as they have ostensible means of subsistence. They are thus obliged to draw on their capital. They sell their cows and thus diminish their recuperative powers. What if the next year's crop is only a six-anna one? In that case it seems to me that famine would be prolonged.

I consider the relief given to have almost absolutely prevented deaths from starvation in my two charges (Kessaria and Debogram). What excessive mortality occurred was at the beginning of relief operations, when the raiyats' ill-fed bodies had little power of resisting fever and other diseases. The vital statistics of Tehatta thanna (which embraces more than half the Kalantor) show an increase in population in 1897 nearly four times greater than that of 1896.

I am of opinion that children under 12 should *only* be relieved by kitchens, which are a great test. The great expense as to separate sheds (necessitated by the caste system) is compensated by the prevention of waste caused by relieving the undeserving. Children seemed to me (in Champaran) to be a useless obstacle to the workers.

As I had no continuous supervision over relief works, I am not in a position to speak of the many questions that have arisen during this famine in their connection. Artizans were relieved in Debogram Charge by jute-twisting, making raw cotton into thread, and this thread again into bed-cloths. Purchased thread was also made into loin-cloths. In Kessaria, the *Domes* made baskets for the relief works. I found the jute-twisting to be used by people as an easy means of fraud, and to be useless in its produce. Rupees 15,190 were expended in Debogram Charge under this head. A poor-house was in existence for a month, but had only one inmate.

I believe the Mahommedan women in the Kalantor will work on the relief works, if the Overseer be content with their sitting apart in a select group, and doing such light work as is required in consolidating or patting the earth-heaps.

I am of opinion that neither in Champaran nor Nadia will any but the professional labourer leave his cultivation, his cattle and homestead, his wife and children, to go and live on a distant work. This was my experience in Champaran.

In Champaran, I found the penal wage a failure. I do not think the system that allows dependants on a relief work a success, especially if the gratuitous relief and the relief work are under separate control. I have found that the people give false names and get a double dole, and that the definition of a dependant [as distinct from Chapter V 42 (d)] is not understood.

I found the Charitable Relief Fund very useful in both Nadia and Champaran, as preventing the people from trenching on their reserve capital. In Kessaria Charge (Champaran), my gratuitous relief attendance numbered between 5,000 and 6,000 persons, i.e., 2½ per cent. of the population. This I consider a very liberal allowance. There was no real *parda* either in Champaran or Bengal amongst the classes gratuitously relieved, although in Nadia, I found that some persons were being treated as such and relieved at their houses.

In Deboagram Charge, on my arrival, I found nearly 30,000 persons being relieved out of a population of 140,000. It took me a month to reduce the figures to reasonable proportions, by going through the various Circles (six in number) and cutting down the numbers. I consider that an area of 300 square miles, with bad and swampy roads, no zamindars or Europeans, and afflicted with so dangerous a form of famine as that of the Deboagram Charge, is far too much for one Charge Superintendent.

I am of opinion that central kitchens are not advisable (as a rule) at the commencement or the climax of a famine, but are extremely useful when the distress has been relieved by an average rice crop.

No caste feelings need be offended by the system, if managed according to the caste laws. It is, as a matter of fact, a form of charity often affected by Hindu zamindars.

In Champaran, I left it to the discretion of my Honorary Circle officers as to whether grain or money should be given, and by far the most gave grain. Paid Circle officers gave money.

In Deboagram, I found a huge reserve of grain; so all relief was given in grain. Had there not been an increased demand for grain owing to the war, the balance of this reserve (amounting to between 5,000 and 6,000 maunds) would have been sold for almost nothing.

I believe that money doles are, as a rule, better than grain doles. They are more convenient for a Circle officer going from place to place for distribution: they are easier to account for and require less staff: they also give a chance of a little trade to the village *modis*, who have suffered severely in this famine by the loss of custom. This, however, is only as a rule; where there are empty bazars, of course, money doles are useless.

Here I should like to mention that I think room should be made in the Famine Code for the Lohia pice. Payment in Government pice only results in the grain-seller getting double profits out of the relief recipients, who first change the Government pice into *dhebuas*, and then (when they feel they know where they are) they buy their food-grains.

I had little or no experience as to poor-houses.

The loans for land improvements have, as a rule, been well applied.

I believe that the Charitable Fund admirably suits the case of agriculturists mentioned in question 232. But I think the help would be more acceptable to the better class agriculturists, and more permanently useful if the Charitable Relief authorities would permit it to be given as a loan in the following manner:—In a village where a tank or a *pucca* well or an embankment is needed, the better class villagers might be relieved on condition that they made themselves jointly and severally responsible for carrying out this improvement, by a way of repayment of the help now granted, in the first year when the crop should exceed 14 annas. This repayment of the loan could be enforced by the Chairman of the Charitable Fund Committee, or his successor.

The food eaten by the poor people in Champaran was bread in the early morning, *satus* (flour) at midday, and *bhat* at night. This is speaking roughly. The *bhat* was

made of rice or makai (*maize*), but the latter was dropped in the hot weather. In Nadia, the people eat *bhat* (of rice) three times a day, but they add more fish and vegetables than the Champaran poor people.

In April and May, the Champaran peasants were in great trouble as to watering their cattle. I saw in my villages cattle being watered from the village well. The better class natives told me there would be no increase in their cattle for that year. Each village has a little tank, but nine out of ten were dry. Mr. Dalrymple-Hay, of Jugowlia Factory, wrote to say that he could not take a loan, but would willingly contract to do the work of re-excavating these tanks. I think that in any case where the landlord's credit is good, and there is more desire to benefit the raiyats than to make a profit, the cubical contents of the proposed work might be calculated, and an allowance made accordingly, tank by tank. This system would have been especially successful in the large tracts where the planters are not proprietors, and so cannot take loans. The system was eminently successful in the cleaning of all the wells in my charge.

In conclusion, I should like to suggest that the Famine Code should be issued in portable dimensions, and should contain diagrams and formulæ for the guidance of such unprofessional persons as have to lay out earth-works on roads and tanks.

(President).—You are a member of the Indian Civil Service?—Yes.

You say in your written note that it has been your experience that it is much easier to prevent starvation in Behar (Champaran) than in Bengal (Nadia). Can you explain that? Is there anything in the temper of the people?—Yes, I think they are more dependent in Nadia.

You say that you consider central kitchens are not advisable at the commencement or the climax of a famine. Why not?—I think at the commencement it is difficult to forecast what the attendance will be, and the kitchens might be rushed. The organization would be difficult. In the climax the children would be too numerous.

You say in Deboagram you found a large reserve of grain?—Yes, that was a Government reserve. It had come up from Calcutta by special sanction of Government, for supplying gratuitous relief.

What kind of grain?—It was Cuttack rice.

You say if there had not been an increased demand owing to the war, the balance of the reserve would have been sold for almost nothing. Prices were pretty high, were they not?—The rice in the first place was brought up in large quantities. Everybody was busy, so we could not sample it. We had to quickly run up *kutchas* godowns, and the rice was consequently damaged by damp, and depreciated in value.

(Mr. Holderness).—You say in your written note that a large village fire in Behar would display a surprising reserve of grain. Were there any such fires?—Yes, there was one in Champaran, at Banaghat, 4 miles from my headquarters.

Was there much grain there?—About 500 maunds.

Did you think there was any until the fire took place?—No. We were giving gratuitous relief there.

Would you have given relief if you had known of it?—We would have found out in whose hands it was.

You say that in the Kessaria Charge (Champaran) your gratuitous relief attendance numbered about 2½ per cent. of the population. This you consider a very liberal allowance. In Nadia when you went there did you not find about 20 per cent. on gratuitous relief?—Yes.

How did you reduce the figure?—I found that there was no other plan but to make general enquiries, and couple this with what I could learn from the appearance of the people. House-to-house visitation was useless. I found. One or two visits might be of use but all the others would be got ready beforehand.

Did you substitute cooked food for grain doles?—No, not till the end of the famine, and then only in the case of children.

I thought the orders were to substitute cooked food for doles?—We did not understand them in that way.

Mr. H.
Foster.
4th Feb.
1898.

MR. W. H. McKEWAN, of Messrs. E. D. Sassoon & Co., called in and examined.

Mr. W. H.
McKewan.
4th Feb.
1888.

(President).—You have come on behalf of the Chamber of Commerce?—I was asked by the Chamber to appear before the Commission.

Is your experience confined to Calcutta?—Entirely.

To what firm do you belong?—E. D. Sassoon & Co.

Was the great rise in prices of the common food grains, which occurred in September to November 1896, and was more or less maintained for the next twelve months, in your opinion a reasonable rise? That is to say, was it fairly proportionate to the failure of harvests, lowness of stocks, and cost of replenishing them? If you think the rise was more than reasonable, to what do you attribute it?—I think it was. I think, however, the initial rise was too great, but that only lasted for a short time. I am talking of wheat. The great rise was caused by Marwari speculation.

Do you remember that four or five shiploads of wheat came from California. Did that have much effect on the market in Calcutta?—Yes, you see they all arrived together. There was something like 20,000 tons. It caused prices to decline, but it was purely local. It was all imported by Sassoon & Co.

Did you think stocks were very low?—Stocks were low in Calcutta, but I had very little knowledge of up-country stocks.

Throughout the period of scarcity was there much excitement or speculation?—It was confined to the months of September, October, and November. The anxiety of Marwaris to speculate induced this import of wheat from California.

Were you in India in 1873-74?—Yes, I was largely engaged in supplying the Madras famine of 1876.

Was it your experience that when Government itself engaged, as it did then, either directly or through contractors, in importing grain, that private trade was discouraged?—Yes, in many cases I know it caused great losses to individual traders.

In spite of these losses private trade did continue active, did it not?—I really forget. The firm I was then connected with was engaged in it, but stopped after Government imports began.

You were engaged on behalf of Government?—As a matter of fact we did buy for Government.

Suppose that instead of relying entirely upon the action of private trade and the Indian market, the Government had resolved to import grain from abroad to a notified amount and for a strictly limited purpose, that is, for use at a large number of its poor-houses, kitchens, and relief-works suppose also that Government so imported either directly or through contractors, and adopted all possible precautions against obstructing the movements of private trade. What effect in your opinion would such action have had (1) on the cost of relief to the State, (2) on the prices of food-grains in the bazars on open markets, and (3) on the activity of private trade?—I think Government could operate in that direction, provided they did it through private agents who were not known. I know that last year the idea that Government might import set the markets in Europe and America on fire (sent prices up). I can hardly answer the latter part of the question.

Do you think the attitude the Government of India took up in engaging in no way to interfere with private trade was a sound attitude?—I think so certainly.

Do you think anything in the nature of a ring in the grain trade is possible in the present day?—In Calcutta there was such a combination among the natives when the cargoes of wheat were imported. They did combine to prevent prices falling, but that had nothing to do with the famine.

As to the possibility of the formation of rings to keep prices up up-country?—I have no actual knowledge.

Had you any concern in the importation of Burma rice?—No.

(Mr. Holderness).—Can you kindly tell me why, after those cargoes came, imports stopped?—The reason was that the price went up in America and Europe. Prices went up not only on account of India requiring grain, but also owing to Australia and South Africa being short.

There was really no margin for profit?—No.

If there had been a margin would grain have come in?—I think so.

Would European houses have undertaken to import at their own risk or have placed contracts with natives?—They could have placed contracts with natives, but the margin ceased to exist.

Did you ever happen to consider the question of importing maize?—Not into this market; it was imported into Bombay.

In any quantity?—A cargo was imported on speculation, but it left a heavy loss. It was not liked and had to be sent up-country.

Was there a sort of cheap-grain association?—Yes.

That experiment was not encouraging?—No.

Suppose the monsoon instead of being good had failed in September, should we not have had a serious position to face?—I suppose so, but there was the Burma rice to fall back upon.

I understand a great deal of the Burma surplus had come into the country. If a general failure of the rains had occurred, could we have relied on trade to do what was required?—Provided prices rose, I think you would have found that grain would have been imported.

The difficulty is that prices may rise, but there is no assurance that they will continue?—Yes, that is the difficulty.

There is less risk in importing from Burma?—Yes. The importation from Europe entails a lengthy voyage.

Still people would have taken the risk yet, think you?—Yes.

You would not form any idea of whether the stocks would have carried us on from September for the next few months?—I have no personal knowledge of the stocks up-country.

Would you approve of a bounty system?—I think it is quite impracticable.

Why?—The proposition was that Government should pay four annas a ton. It seemed to me that it would introduce speculation among the small dealers, and if the market went down they would get into difficulties and upset trade altogether.

Would there not also be a danger that the bounty might send up prices in the country from which imports were made?—It would certainly.

So you might lose something?—It would raise the market against you.

Was the combination of grain-dealers you mentioned successful for long?—About six weeks.

(Mr. Bourdillon).—You know that the high prices of grain were steady all over India. Who sets the rate going? Is it set by the big dealers or who?—I suppose it is. The big native dealers are kept well-informed and the little people take their cue from them.

After the first rise do you think the rate of grain was unreasonable?—No, I don't think so. I may explain that the mills here were able to export flour to Singapore and other Eastern markets and sell it at a profit: so prices could not have been unreasonably high.

(Mr. Holderness).—Is there much briskness now in the export trade?—A considerable business has been done; forty or fifty thousand tons have been contracted for, of the new crop of wheat, for shipment in April and May.

(President).—What is the export from Karachi?—I understand that a large business has been done for the export of the new crop of wheat from Karachi.

BARU NOBO GOPAL BANERJEE, District Engineer, Bankura, called in and examined.

I put in a written statement of evidence.

1. (a) *Departures from the prescriptions of the Bengal Famine Code which have occurred in the province during the recent famine.*—I venture to submit that, so far as I am aware, there has not been any departure from the prescriptions of the Bengal Famine Code in this district; all operations in connection with the recent famine were carried out according to the Code regulations.

2. (b) *Degree of success which has attended the measures adopted, considered primarily with regard to the relief of distress and saving of human life, and, secondly, with regard to economy.*—The measures adopted in the first stage of the relief operations here were that the District Board's budget was remodelled in the light of the instructions conveyed in paragraph 17, chapter III, of the Famine Code. In remodelling the budget, the District Board, after providing for the bare maintenance of roads and establishment charges, diverted all the Board's funds from non-affected tracts for expenditure on affected tracts. As the price of food-grains was high all over the district, the diversion of all expenditure from non-affected areas was extremely hard on the people of the latter, as they were deprived of their usual earnings from the annual road repairs. The effect of this has been that the non-affected areas close to the affected ones became more or less affected within a very short time, and the sufferings of people residing in them increased day by day, and ultimately we had to extend our operations and bring those people under gratuitous relief. If ordinary road works had been allowed to go on, the people residing in non-affected tracts adjoining the affected areas would not have suffered so greatly. No life, however, was lost from starvation, owing to strict supervision of the inspecting officers of all departments.

3. From my recent experience I am strongly of opinion that the mode of gauging distress by test-work was very cumbrous and troublesome, and requires large establishment. The working classes of this district are so conservative with respect to their wages that until forced by actual starvation, they would not consent to work on low wages, and hence actual distress which existed among these people could not be gauged in the beginning of the test operations in some cases. I would, therefore, give up this system altogether and introduce in its place piece-work at low rates on the family gang system for testing distress. This will, to a certain extent, do away with the necessity of classifying labourers, and it would also be unnecessary to see whether all the members forming the gang are working to the utmost of their ability or not.

4. The mode of payment of earthwork at the rate of the 83 cubic feet, etc., was not understood by the coolies, and much confusion therefore ensued. I would suggest that earthwork should be executed and paid in multiples of 5, as 5 x 5, 5 x 10, 10 x 10, 10 x 15, etc. For the sake of calculations, etc., the latter method is also very simple and understood by the coolies. This will also avoid fraud.

5. The classification of soil, viz., soft, medium and hard, led to some confusion, specially in determining between soft and medium, particularly during the rains, when even the hard soil becomes medium in consequence of frequent rainfall. A case of this kind occurred during the late famine, when a petty subordinate paid for soft soil to the coolies and charged for medium soil in his accounts, and he had to be dismissed in consequence. To avoid such frauds, I would have only 2 classes of soils, i.e., ordinary, viz., soft or medium and hard. The rate of these kinds should be fixed in consideration of the price of food-grains, and with a little margin it will not be necessary to make separate provision for children and dependants.

6. The total expenditure during the recent famine on relief works was Rs. 49,000, out of which Rs. 4,035-8 were on account of tools and Rs. 4,228-8 on account of establishment.

<p>Total expenditure on works in the district. 49,212 8</p> <p>Deduct—Expenditure in the Raipur circle. 14,259 6</p> <hr/> <p>Net expenditure on other circles which were supplied with tools. 34,952 13</p> <p>Cost of purchasing tools. 4,035 8</p> <p>or, say, 11.54 per cent.</p>	<p>In the Raipur circle no tools were supplied to the work-people, as they were successfully induced to bring their own tools. Deducting the cost of works in this circle, viz., Rs. 14,259, the cost of tools which were supplied to the other circles was 11.54 per cent. of the total cost, as worked out in the margin. Even then there were complaints of shortness of tools. The cost of tools was therefore a heavy charge. The coolies generally change their old tools,</p>
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specially *kodalis, tanguas, etc.*, for the new ones supplied to them during the working period. This could not be successfully prevented, even by issuing tools in the morning and receiving them back after the day's work in the evening. Sometimes it has been found that the petty road mohurrirs also allow such change and earn something thereby. On close of famine operations it has been found that more than half the number of tools are nearly unserviceable, and their sale-proceeds would not amount to even a fourth part of their original cost. I think that a great saving may be effected if arrangements could be made for supply of tools by the following method. In this district mates, as contemplated in the Government circular about piece-work, are not available, as they have not sufficient funds to make payments to the coolies daily from their own pockets and to receive payment from us after four or five days; nor can they keep accounts properly. I would prefer the employment of trained mates like petty contractors or piece-workers to make daily payments to the coolies out of their own pockets, they receiving payment after their works are checked weekly by an upper subordinate. These piece-workers, in consideration of the money they lay out and the petty establishment they are required to maintain, may be allowed a profit of 8 per cent. clear over the actual cost of work. This rate of profit may be increased to 11 to 12 per cent. when the piece-workers make their own arrangement with the labourers for tools, as is done by ordinary contractors. It is within my experience that the contractors sometimes induce the coolies to work with their own tools, when they have any, and pay them a small sum, say, 1½ pice, to each digger weekly. This latter arrangement will prove very economical, as it will save the cost of tools and petty establishments, only a few Rs. 1 pick-axes for digging hard soil being supplied by One sub-overseer will be able to conveniently look after the work of nearly 700 or 800 coolies, measure their works, say, every alternate day, and keep the measurement book ready for examination by the upper subordinate, who, after checking the measurements at random, will make payment to the piece-workers as stated before.

7. If work is carried on in this system, the botheration of setting out task, arranging numbers of diggers and carriers, and classification of other sorts will be at an end, the piece-workers themselves arranging all these matters according to our written instructions. In this system the coolies will work on Sundays, and Christian subordinates will not be required to measure their works on that day. If it be the intention of Government that no work should be executed on Sundays and other holidays, and that coolies will be given their wages for those days, then the minimum wage prescribed may be given to them. While commenting on the system of piece-work, I cannot but point out one difficulty encountered in the practical working of it. Naturally mates are not inclined to employ children, weak and infirm persons, and women who have no able-bodied male relations to dig earth for them to carry. I would, therefore, suggest the collections of metal as a suitable employment for such classes of persons, the more able-bodied women and men breaking them into smaller pieces. I subjoin tables showing the amount of task to be exacted from each class of persons.

Stone and quartz metal to be collected from an average distance of 700 to 800 lineal feet, cubes of 1 inch to 5 inches.

TABLE No. 1.

Piece-work on low rate during test period.

Collecting 100 cubic feet of stone metal and stacking on berm of road by old and weak adult men, women, and children of above 14 years of age :—

	R. a. p.
Collecting stone—	
Six women or children, at 1 anna 3 pies each.	0 7 6
Breaking stone—	
Five men or strong women, at 2 annas each	0 10 0
TOTAL	. 1 1 6
Add—Sundries	. 0 1 0
TOTAL	. 1 2 6

Baru
Nobo Gopal
Banerjee.
4th Feb.
1898.

Babu
Nodo Gopal
Banerjee.
4th Feb.
1898.

TABLE No. 2.

Piece-work on higher rate after the test period is over.

	R a. p.
Collecting metal—	
Six women or children, at 1 anna 9 pies each .	0 10 6
Breaking stone—	
Five men or strong women, at 2 annas 6 pies each .	0 12 6
TOTAL .	1 7 0
Add—Sundries .	0 1 0
TOTAL .	1 8 0

In many parts of this district loose stones lie scattered on the surface of the ground, and women and weakly persons were very successfully employed in collecting them during the recent famine. In parts where no such metals are available, I would recommend that such persons be admitted to a kitchen or poor-house and employed in some light work, such as collection of ghooting and sand, fuel and leaves, etc., which may be had free from the jungle, or they may be formed into a separate gang at a distance from the place where work on the piece-work system is going on, as laid down in the Famine Code.

8. (e) *Advice as to the measures and methods of working which seem likely to prove most effective in future in those two respects.*—As soon as it appears from the police reports that there is any apprehension of failure of crops, a very careful investigation by an experienced officer of the position of Deputy Collector should be commenced over and above the investigations made by the different inspecting officers of the several departments, viz., the Deputy Inspector and Sub-Inspectors of Schools, kanungos, Excise Sub-Inspectors, overseers, etc., on the following points specially.

9. If the failure be simply due to the want of rainfall, the officer, if he thinks that the paddy could be saved to some extent by irrigation from the neighbouring bunds or tanks, and if such bunds or tanks belong to different proprietors from whom the owners of paddy-fields suffering from drought cannot lawfully claim a portion of the water, the Deputy Collector may be empowered to induce the proprietors of such tanks to allow a reasonable amount of water to save the paddy.

10. The Deputy Collector should ascertain very carefully the probable outturn of the crop and correct the crop report furnished by the police.

11. He will, with the aid of the Income-Tax Assessors, enquire and report about the stock of food-grains in the locality and estimate how long such stock would last, and will try to induce people to reserve a portion of the stock for subsistence of themselves and their raiyats at least for four months.

If his report shows that there is real cause for apprehension and there is at the same time a steady rise in the price of food-grains, the district officer should commence to make advances under the Land Improvement and Agriculturists' Loans Act on an extensive scale, as the experience of the last famine has shown that we can postpone the commencement of actual famine operation for a time. To guard against the misapplication of these loans, I would suggest that a major portion of the loans should be granted in grain, if practicable, giving only a small portion, say, about $\frac{1}{3}$ rd in coin to enable the poor agriculturists to purchase cattle.

12. The system of advancing grain will necessitate storing of Government grain at police stations and outposts. This is troublesome; but it will guard against the misapplication of the loans, viz., in laying out the money in trade or in repaying old debts, etc., etc.

13. If the loans are taken for the purpose of excavation of tanks or bunds, it is necessary that rough survey plans and estimates for such works should be prepared by the parties concerned and submitted to the Collector for his approval before loan is granted.

14. Professional labourers should be informed of, through police or any other suitable agency, and induced to go to works that might be going on on an extensive scale, such as construction of railway, etc., at the time, within a distance, say, of 50 miles. Such labourers may, where necessary, be helped with small travelling allowance, which can easily and gradually be recovered through the department concerned.

15. During the famine of 1873-74, a large number of new roads were constructed by the Public Works Department in this district, but the repair of the then existing roads was not undertaken as a relief measure. After the expiry of the relief operations the Government suddenly demanded from the Road Cess Fund the cost that was incurred in the construction of the new roads. To repay this cost the Road Cess Committee had to stop the repairs of both the old and new roads for three years together. The effect of this was that all the roads became exceedingly out of order. I am, therefore, of opinion that in future famines only such new roads as are really necessary should be constructed, but thorough repairs to the existing roads should be first undertaken, even by taking loans from Government if the Board's funds do not permit, and finished, as far as possible, within the period of relief operations. Besides this, storing of metal for future maintenance of roads, say, for three years, should be undertaken. I would bring and stack metal to the berm of road, only such quantity as would be necessary for the following year's repairs, and keep the rest in stock at quarries to prevent wastage. If the roads are thoroughly repaired and metal for future repairs is collected, there will not be heavy demand for repairs during the succeeding two or three years, and the money thus saved can be well utilized in other important works, such as bridging, etc., or in recouping Government expenditure, if demanded by Government from the Board.

16. Large works are the best, as the supervision thereon is sufficient and concentrated. In proposing large works, I would, in consideration of the district surroundings, suggest the following:—

- (a) Damming up of *khaals* to create a water-supply in order to protect large areas from drought.
- (b) Excavation of canals.
- (c) Opening of new roads as railway feeders, if the proposed railway lines are constructed.

The first three should be under the supervision of Public Works Department officers. They should, however, consult the Collector regarding the rates of wages to the labourers.

For minor works I would classify the following:—

- (a) Construction and repairs of roads.
- (b) Excavation and re-excavation of tanks and bunds and clearing of silted-up channels.

These should be under the charge of civil officers.

17. I am of opinion that the Board's fund, in districts like Bankura, where it is very limited, should not be applied for gratuitous relief, but for relief works. If, without stopping ordinary repairs in the unaffected tracts, thorough repairs of roads on all tracts be undertaken, the labourers would get work and would not get weakened, so as to become objects of gratuitous relief and increase the number on gratuitous relief more than the workers, which happened recently at the beginning of the relief work.

18. The daily report of works from which the D Statement is prepared ought to be more complete. A column should be added to show the work done in the way of collection and spreading of metal. A copy of it should be submitted daily through the Charge Superintendent, instead of weekly, as laid down in section 86 of the Famine Code. This will obviate the possibility of any tampering with the accounts by potty subordinates. Similarly, the D Statement itself should have a column for showing metalling, etc. I would have every sort of work put daily in the daily report, so that it may be a complete history of each day's work from which the fortnightly statements can be submitted accurately. A new form for daily report and revised D Statement may be proposed.

19. As regards the date of submission of the fortnightly Statement D, I would suggest that the 4th and 20th of every month be fixed instead of 2nd and 17th, as this would ensure the inclusion of all works done during the previous fortnight. This will obviate the difficulty and delay in preparing final accounts after the close of the famine operations.

20. As regards supervising staff, I would propose that, instead of employing men fresh from college, who have no experience of practical work nor the power of control, experienced subordinates from the Public Works Department and from District Boards of unaffected districts should be employed as far as possible. These men having permanent appointments at stake, would have a greater sense of responsibility than can be expected from a temporary man.

(President.)—You are District Engineer of Bankura?—Yes.

Have you been there long?—Nearly 25 years.

I understand from paragraph 3 of your note that the labouring classes resent being asked to work on low wages?—Yes; they do not like to come even though actually starving.

(Mr. Bourdillon.)—Are they afraid of establishing a new rate?—Yes, because they are averse to accept wages which are much lower than that they get in ordinary years. They contend that when there is rise in the price of food-grains their wages should be increased instead of being diminished, and that instead of gauging distress by test-work their emaciated condition should be considered as a sufficient proof of the existence of distress.

(President.)—Do these people believe that Government is doing something for their good or is trying to get something out of them?—They don't consider the point. They don't like working at low rates.

(Mr. Higham.)—What works were you principally employed on?—Mainly on the construction of roads, the excavation of tanks, bunds and the re-excavation of a canal.

When did your relief works begin?—In May.

How many famine labourers had you?—More than 1,000.

At the test period?—Very few.

How many charges?—Four.

When did works close?—29th September.

You always adopted piece-work?—We first started task-work, and then had piece-work.

When you had task-work how often did you pay the labourers?—Daily.

And on piece-work?—Daily.

Why do you propose to employ petty contractors?—For the supply of tools and for reducing the establishment.

But the contractors won't supply tools from their own pockets?—Yes; they generally do so in Bankura, where the rates include purchase and wear and tear of tools.

You suggest in paragraph 6 that as mates are not available in your district you would prefer the employment of trained mates like petty contractors to make daily payments to the coolies out of their own pockets. When would the mates be recouped?—After two or three days.

When your piece-work was not sufficient you had task-work?—Yes, but generally piece-work was found sufficient after the test period.

How did you do the metalling of roads?—Partly by task and partly by piece.

Were they new roads or the repair of old ones?—The metalling was mostly on old roads and metal was collected for some new ones.

Were the roads metalled?—No, not the new roads.

(Mr. Holderness.)—When you started piece-work what were the rates?—Those laid down in Government Circular No. 181, dated 8th May.

How did they compare with ordinary rates?—

The ordinary rates were— and the piece-work rates—

	R a. p.		R a. p.
For soft	0 2 0	For soft	0 2 9
„ medium	0 2 3	„ medium	0 3 6
„ hard	0 2 6	„ hard	0 4 0 to 4a. 6p.

Did private employers complain that you were attracting labour from their works?—No.

How much did they earn on an average?—The males earned 2 annas 6 pies and the females 1 anna 9 pies.

Were the men in the majority?—Yes, specially amongst the Sonthals.

Did these men who earned 2 annas 6 pies support their dependants?—Yes, with one meal a day.

Did not their women and children go on to gratuitous relief?—No.

You did not have a maximum beyond which a man could not earn?—No; it was unlimited piece-work.

What was the size of the gang?—They were family gangs consisting of five to ten members.

They earned as much as they liked?—Yes.

Did they work continuously?—Yes. Some of the people after working very hard for a few days and earning about 4 to 5 annas per diem stopped work for a day or two for recreation.

Had you many works open?—Forty small works.

Did you supervise the 40 works?—I was entrusted with the general supervision of all the works, but I had an extra establishment of overseers, sub-overseers and mohurrirs over and above the permanent establishments who were in immediate charge of the works.

Taken on as temporary hands?—Yes.

(President.)—As regards the Sonthals, their women very seldom come to work?—Yes.

BABU DWARKA NATH SIRKAR, District Engineer, Nadia, called in and examined.

I put in a written statement of evidence.

Section 31.—(a) Section 31 of the Bengal Famine Code contemplates division of the famine area into circles only under inspectors. The arrangements which turned out to be the best in this district during the recent famine were the following:—

The area was divided into charges, each under a Superintendent and an assistant, and the charge was subdivided into circles varying in areas in accordance with the degree of intensity of distress and density of population. Each circle was again split into sub-circles or distribution centres, of which the number varied between 4 and 6, according to local requirements. Each circle was under an Inspector, and each sub-circle or distribution centre was under a sub-circle officer, whose duty was only to distribute grain-doles to persons admitted by the circle officers, and each provided with a card-board ticket. The centres were so arranged as to give sufficient work to each sub-circle officer for the whole week, dividing the villages of his centre into convenient groups. Each centre officer was supplied with a copy of Register No. 13 kept by his circle officer, and it was compared once at every fortnight with the original register by the circle officer himself, and the matters were thus kept under a very good check.

(b) This sub-circle arrangement relieved the circle officers of their mechanical duties of distribution of grain-doles, and thus enabled them to attend to their other more important duties prescribed in section 31. The arrangement was also very convenient for the recipients of the gratuitous relief, giving them a distribution centre within a convenient distance of their homes, and relieving them of the considerable trouble due to large daily gatherings at

the centres. The circle officers were under the strict supervision of their Charge Superintendents and assistants.

The arrangement attained desired success, putting a stop to all sorts of fraud (false personifications, etc.) on the part of the recipients as the control became more efficient, the daily gathering at each centre being smaller.

Section 35.—(a) The contractors were at first chosen, as the section requires, from amongst the grain-dealers of the localities, and they were allowed to make purchases locally, but subsequently this arrangement had to be stopped for reasons given in (b), and contractors with larger means had to be chosen from outside the area.

(b) The experience showed that the local contractors generally made local purchases, not having had sufficient means to import grains from outside, and this resulted in rapid rise of market rates, entailing considerable difficulties and hardships on local population not in receipt of any kind of relief. The latter arrangement, which was a deviation from the provisions of the section, worked very successfully, ameliorating the general condition of the distressed area very appreciably. When rice for distribution began to be imported from Calcutta, the local market fell, and the importations made by petty local traders from Barh (which was the only source of supply open to them) kept pace with the local private demands.

(c) The section should, I think, have a proviso that when there is apprehension of such local difficulties, the contractors appointed under this section should be enjoined to import rice from safe distances, and should be men having means sufficient for the purpose, whether they be local merchants or outsiders.

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Section 42.—(d) It was found, during the recent famine in this district, that some people who were able, and bound by the custom of the country, did not actually support their disabled dependants. The state of things in this respect is hardly better even in easier years. These disabled persons do not, strictly speaking, come under section 42. They, however, need Government relief in bad years when private charity fails. There should, I think, be a proviso in this section either to compel their relatives at time of distress to support them, or to relax the section in such a way as may cover their cases.

It has been found also that helpless children and many of the disabled persons, as well as dependants of workers employed at distances from kitchens and distribution centres cannot attend these latter places unless some one leads them. In a severe famine, able-bodied persons generally either go to work, or are compelled to remain at home to do tasks set to them under section 45 of the Code, and thus these disabled persons scarcely get any help from their neighbours and relatives. There were cases, during the recent famine, of young children having been misled and exposed to danger for want of guides, and the in-charge officers had to undergo additional trouble in finding them out. The section should have some provision to cover such cases. It may do well if any wage or grain-dole be given to one or more able-bodied persons in each village, according to requirements, for escorting such disabled persons and children as may require their help. The difficulty is especially felt in cases of blind persons and children in arms, as well as those who are incapable of taking care of themselves.

Section 44.—(d) During the late famine it was practically found that the arrangement to distribute grain-doles through local banias or other grain-dealers on tickets issued by competent Government officers, was open to objection, inasmuch as the banias and grain-dealers as a class are not very reliable. They often give short doles to recipients, and no amount of care and vigilance on the part of supervising officers can check this fully.

The distribution of doles in the presence of responsible Government officers is by far the better method, and from experience in the recent famine it has been found practicable even in a very large operation, reducing jurisdiction of circle officers or by appointing officers subordinate to them.

Section 142.—(a) The present Bengal Famine Code does not prescribe any return for relief granted to artizans under this section. This seems to be a great want, as no proper check can be exercised in the absence of periodical returns. In the prescribed return (Form 6) there is no column for showing figures relating to this operation.

RELIEF WORKS.

Section 52, clause (4).—(a) During the recent famine in Nadia, the distinctions prescribed in the Code as regards large and small works were strictly maintained. The former were under the Public Works Department and the latter were executed as civil agency works, but both were under the charge of the District Engineer, Nadia, as regards professional management and supervision. He conducted them, maintaining the distinction prescribed in the Code. Large works which were, with one exception, construction of roads, were open from the beginning to the end of the famine. Small works began gradually as the increase in the extent and intensity of the distress necessitated their commencement. These latter works mostly consisted of excavations and re-excavations of tanks, which were open largely in the hottest part of the season, and they were mostly finished before the rains had set in heavily. In the rainy season the small works which consisted of construction of new roads and repairs and improvements of existing roads running through the distressed tracts, were carried out. At the very commencement of the distress the repairs of some these existing roads were taken in hand as test-works, but as soon as the tests indicated famine or severe distress, works were stopped on them, and they were thus kept in reserve for being taken up again in the rains, as they, from their very nature of location, form very good small works in the season, giving employment to workers within easy distance of their homes.

The tank works began in the middle of February. Most of them were re-excavations, and they were not also sufficiently dry to admit of re-excavation before that time.

(b) The advantages of the arrangements were as follows:—

(1) All large works were under charge of efficient professional staff of establishment, and the organization and management of them were by far superior to those on

small works. The employment of most of the workers on those works in the early days of the famine kept matters very tight as regards organization, discipline, exaction of proper tasks, as well as supervision and vigilance.

(2) Men trained on those works by employment as sarkars and mohurrirs were transferred to civil agency works, as the latter works commenced gradually with increase of distress, with appointments as Officers in Charge and sarkars, and thus there was good staff and good management also on the latter works at moderate expense.

(3) The workers had employment on tanks close to their villages, which abounds in trees and various other shades, and this saved them the trouble of being exposed to intense summer heat, which is unavoidable on roads in open fields, and this also saved expense, minimizing largely the necessity of supply of numerous sheds for their shelter.

(4) There was also considerable saving by this arrangement under the head of water-supply, as in villages the workers had water within their easy reach in most cases.

(5) The supply of works within easy reach of the workers also saved them the loss of time they had to incur in going to and coming back from distant works, and this enabled them to do their tasks a little earlier, and as they were mostly poorer cultivators and this was the cultivating season, they could devote some time to their cultivation; and although this was not quite consistent with provisions of section 55, clause 3, the indulgence thus afforded had the good effect of cultivation not being seriously interfered with. Private employments were not available in the tract anywhere during the famine. There was therefore no possibility for any worker to supplement his income by doing private works during the rest of the day.

The only advantage of the arrangement was that all classes of workers had to be employed on large works, and this was not consistent with section 54. The rate of earth-work on large works also increased very considerably owing to employment on those works of a large number of D class workers. This could no doubt be avoided in early days of the famine by keeping an adequate number of small works on roads, but in the intermediate period this was not at all possible, as tank works cannot give sufficient work to D class workers, who, in this part of the country, are mostly females and children incapable of doing any other works than patting roads, breaking clods, dressing road surface, and clearing jungles and the like, being weak and unused to dig or carry earth.

(c) As workers in this part of the country are mostly poorer cultivators, and their females are unused to outdoor works, such as digging and carrying earth on roads, and they are also physically unfit for such works, their manner and customs standing seriously in the way of their coming out to work with men, the task-work system is neither economical nor so suitable here as it is in Behar and other provinces.

The experience gained during the last two famines suggests the following systems and arrangements to be better in all respects in this part of the country:—

All test-works here should be done under the task-work system.

The large works should be opened after the distress has been sufficiently tested, and those works should be done throughout the whole period of famine under the piece-work system by employment on them of only able-bodied workers. For the weaker workers some task-works should be kept open at reasonable distances; but workers who fail to earn enough on piece-work for their sustenance, as well as for their dependants, and those selected by circle officers by house-visitations or by tests through poor-houses only, should have employment on them.

The tank works must all have piece-work system on them in the intermediate period, when some road works must also be kept open under the task-work system at places for weaker labourers.

The task-work system does not suit well in this part of the country, and it is not at all economical here. It is also mere tempting to some class of workers, as under this system all members of a worker's family get relief in some shape or other, and the worker can thus get through difficulties created by the famine without hard labour. This has also a demoralizing effect.

While the other system (piece-work) either removes this evil or reduces it to the minimum, it, on the other hand, gives a fair opportunity to another class of workers who do not care to work hard to earn enough for their families in order to save them from the disgrace of coming out for

relief, disregarding the customs and manners of this part of the country. The number of this class of workers here is by far the greatest.

The facts and figures given in Appendix A practically show that the piece-work system is by far the most economical here. The system may no doubt allure men to work who may not actually be starving, and some people may also earn under this system a little more than what they may require for their bare sustenance; but in a famine area the percentage of such population cannot be large, and this evil may also be kept under considerable check by administrative abilities on part of officers in charge. My impression is that, with all allowances for this evil, the advantages of this system outweigh the disadvantages very considerably.

Section 61.—(a) In this part of Bengal the workers are mostly poorer agriculturists. They do not live in camps, but come to work from their homes, and they seldom come for admission at afternoon, unless they do so with some evil motive. During the recent famine they were told to come early in the morning, and they did so almost invariably. Only those of class D were irregular in this respect. This arrangement reduced the expenditure under the head of "admission fee" to the minimum.

(b) Workers were at first allowed to come also in the afternoon, and it was found that many wicked persons took admission wages and went away and never came to work again: they played such tricks especially on Saturday afternoons to take advantage of the Sunday minimum wage. To prevent this evil it was ruled, with sanction, that no one would get Sunday wage who would not be on work on three successive days immediately preceding each Saturday, and this checked the fraud quite satisfactorily.

Section 62.—(a) During the recent famine in this district, the classifications adopted were B, D, and special. B class included all able-bodied workers of both sexes. D class workers were those who were unused to digging and carrying earth and also physically unfit for such works. They were mostly females and small children, and they did only patting, consolidating, dressing crest and slopes of roads and tanks and cleared jungles, etc. Class special comprised workers employed on various immeasurable works which from their very nature could not be constituted into definite tasks, such as preparing and carrying pegs, attending survey parties, etc. This class also included the numbers to whom allowances were paid for Sundays, holidays and admission days. The children in each class were of three grades, viz.:—Grade I, children of 12 to 16 years; grade II, those of 7 to 11 years; grade III, children in arms.

(b) The above described classifications met all requirements in this respect very well.

The classifications adopted in the present Famine Code are elaborate and they involve some practical difficulties, but they are otherwise complete in themselves in every respect, and they meet the requirements of all parts of the country equally well.

Section 63.—(a) People were at first allowed to form themselves into gangs according to their own choice, and this resulted in the formation of numerous small gangs and this increased works of supervising officers very considerably. Attempts were then made to form large gangs of 100 persons of different classes, but this was practically found not to work well, especially as the attendance was very irregular. Gangs of numbers ranging between 30 to 40 were then formed, and these worked very well in all respects.

(b) In this part of this country, where people do not live in camps, numbers in gangs should not exceed 40. The larger the gang the greater is the difficulty in keeping them full in their numbers and making them work well.

Formation of mixed gangs (gangs consisting of persons of both sexes) is also not practicable here. Except those of Banias, Bagdis and Mochis, the females of other castes, specially those of Mahommedans, cannot be made to work with men. This is also a serious difficulty in forming gangs with able-bodied diggers and female carriers. Females who came for employment worked in separate gangs, being classed as D class workers and doing only light work.

Section 66.—(a) There were some practical difficulties in following the proportion prescribed in this section as to tasks of workers of different sexes and classes. Women and children here cannot do as much work as this section contemplates. They are, with the exception of Banias and Bagdis, utterly unused to do earth-work, and physically, too, they are not fit for hard work. The proportion as

regards tasks practically found to be suitable in this part of the country are as follows:—

Woman	:	:	:	Half task of a man.
Big child	:	:	:	Ditto
Small "	:	:	:	One-fourth of a man.

Banias and Bagdi women alone can do three-fourths of the task of men.

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Extract from the General Famine Report of the District Engineer, Nadia.

Para. 148.—*Piece-work and its results compared with those of task-works.*—In Public Works Department subdivisions I and II, both these systems had fair trials during the famine under report, under the able managements of Babus Bhogoboti Churn Ganguli, Supervisor, and Haridas Ganguli, Overseer. In the former both of the systems had trials on the one and the same road, and in the latter the task-work was on a road and the piece-work was on a river channel. In order to compare the results of these systems as fairly as possible, I therefore give below the facts and figures deduced from the results of the works carried out in sub-division No. I.

Para. 149.—*Task-works.*—The total number of male units of each class of workers employed on task-work in the sub-division were as follows:—

B Class	.	.	.	.	349,096
D class	.	.	.	.	275,020
Irrespective of task	.	.	.	.	73,184
Total male units	.	.	.	.	697,290

The earth-work done by these workers amounted to 19,110,478 cubic feet, and the expenditure incurred on this work under various heads amounted to ₹1,02,108-13-3, viz.:—

	₹	a.	p.
1. Wage paid to B class workers	34,337	14	3
2. Ditto D ditto	85,904	1	6
3. Ditto number employed, irrespective of task	7,203	12	0
4. Work establishment	11,482	15	10½
5. Allowances to dependants on workers	13,180	1	7½
Total expenditure	1,02,108	13	3

The sum shown against item 3 comprises the following amounts:—

	₹	a.	p.
Wage of actual workers employed, irrespective of task	680	7	6
Minimum wage paid to workers for Sundays and admission days	5,171	0	3
Jubilee holiday allowances	1,352	4	3
Total	7,203	12	0

Para. 150.—The expenditure incurred on dependants has been treated in the Collector's half-monthly returns under the head of gratuitous relief. I treat it here as a part of the expenditure on task-work, as the employments of distressed people on relief works under the piece-work system show that the dependants mostly, if not all, receive such help only when their parents or other guardians are employed under the task-work system, and are not allowed to earn more than what they require to keep their bodies and souls together, and that under the other system they are capable of earning as much as may enable them to give their respective dependants at least famine rations.

Para. 151.—The figures given above show that the outturn per male unit, taking those of all classes together, is 27·44 cubic feet. This is delusive. The B class workers, of whom the male unit is 349,096, alone did the work given above. D class workers did not at all contribute to the quantity of the work, and most of those shown as number employed irrespective of task received payment without any work. The outturn per male unit of B class workers is the real figure, and it is 54·74 cubic feet. The average outturn was less than 65 cubic feet, which was the task set owing to employment on the work of numerous young children and women who could not do their tasks fully and yet got minimum wages.

Para. 152.—The amount paid to B class workers for their actual working days amounted to ₹34,337-14-3

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giving a net rate per thousand cubic feet of earth-work of ₹1-12-9, but the rate calculated from the gross expenditure as given above in paragraph 149, amounts to ₹5-5-6 per thousand cubic feet, and the earning of each male unit comes to 1 anna and 7 pies. But the gross expenditure, if apportioned amongst the B class workers, alone amounts per head to 4 annas and 8 pies as value of an outturn per male unit of 54 7/4 cubic feet, as calculated above.

Para. 152.—Results of employment of workers under the piece-work system are given below:—

Para. 153.—The total number of workers, all of whom were of the B class, was 9,583. The earth-work they did was 1,055,464, and the expenditure on the work amounted to ₹2,569-15½. The outturn per worker was 110-13 cubic feet and his average daily earning was 4 annas 3 pies; and the average rate per thousand cubic feet of earth-work was ₹2-6-9. No Sunday or admission day allowances were allowed to these workers, and their dependants received no allowance of any kind. The earth-work done under this system was mostly in very stiff clay soil; ordinary local rates for earth-work in such hard soil range between ₹3 and ₹3-8 per thousand cubic feet according to leads and lifts.

Para. 154.—The facts and figures given above show that under the task-work system a B class worker actually did on an average 54 7/4 cubic feet of earth-work only and got an average wage of 1 anna and 7 pies, and that the same worker did 110-13 cubic feet of earth-work under the piece-work system, and earned on an average 4 annas 3 pies a day. The fact is, under the former system an able-bodied B class worker did the full task and he earned also the full wage. The average wage, as well as the outturn is, however, less, simply because the women and children employed as B class workers failed to do their tasks in full, and they, however, got full wage, as the order was to give such wage to workers who worked hard honestly and yet failed to do full task owing to either physical weakness or to their being unused to such works.

Para. 155.—On the task-work the total number of D class workers was 418,037, and that of the dependants was 422,134, giving together a grand total of 840,171, against a number of actual B class workers of 349,096. And there were thus on the work 2-40 souls who received wage or allowance in some shape or other for no work, against each actual worker, and if the money actually paid to these non-workers be added to that of the B class worker, his wage comes to As. 4-8 per day, against an outturn of 54 7/4 cubic feet of earth-work which he actually did, including Sunday, etc., allowances. Under the piece-work system a worker did 110 13 cubic feet of earth-work, although the soil he worked in was very stiff, and he earned As. 4-3 a day which was sufficient for maintenance of four persons at famine rate of rations, viz:—

		s.	p.	
1 Man		2	0	(Full wage.)
1 Woman		1	0	(Minimum wage.)
1 Big child		0	9	Ditto.
1 Small child		0	6	Ditto.
	TOTAL	4	3	

Para. 156.—This result shows that had the B class workers employed under the task-work system been allowed to work under the piece-work system, they could each support three dependants, and the total number of dependants they could support at this rate, their number being, as stated above, 349,096 (male units), comes to 1,037,288, which is larger than the total number of D class workers and dependants actually paid on the work by 197,117. Under the task-work system they did only 19,110,478 cubic feet of earth-work, under the piece-work system the earth-work they could do, at 110 13 cubic feet each, is 38,400,560 cubic feet, which is more than what they actually did by 19,290,082 cubic feet, or in other words they would have done about two-thirds of the earth-work which yet remains to be done to complete the roads of this sub-division.

Para. 157.—The total expenditure under the head task-work was ₹1,02,109 (see details given above in paragraph 149). Of this sum ₹34,338, or 33-62 per cent. on the total expenditure, was wage of actual B class workers, and ₹67,771, or 66-37 per cent., was expenditure which did not contribute in any way to the quantity of the earth-work actually executed. Such expenditure under task-work system is unavoidable, and this is therefore a great disadvantage of this system. Many of the D class people who were on the relief work as nominal workers, were indeed not family members of the B class workers. In the above calculation this fact has, however, been ignored, as more than an equal

number of women and weak relatives of the workers were recipients of gratuitous relief in relief depôts.

Para. 158.—The great advantage of the task-work system is that it affords means to people who are either not capable of earning enough for support of their dependants even enough for their own maintenance under the piece-work system, and in a severe famine such work cannot be altogether done away with.

Para. 159.—The advantages of the piece-work system are many in number:—(1) It ensures proper outturn from the money actually spent, and it thus prevents waste; (2) it does away with Sunday, etc., allowances; (3) it reduces expenditure under the head of establishment; (4) it saves the people from the trouble of bringing their infants and disabled relatives to work from distances for allowances; (5) it does not compel such of their females as are not accustomed to come out to come either to the work or to gratuitous relief depôts, although they themselves are capable of earning for their maintenance; (6) it enables the workers, who are generally cultivators, to attend to their fields as well. Practically many of the coolies employed under the system were found to come to relief works in the latter part of the night and to work on them till 8 or 9 a. m., and then to go to their fields to attend to their cultivation. The disadvantage of this system is that it often tempts people who are not in extreme need of such help to come to relief works. This is no doubt objectionable, but as compared with the waste of money which is unavoidable under the other system, this waste is very insignificant, and as in a famine area almost every soul is in distress, some way or other this may be fairly ignored.

(President.)—You are District Engineer of Nadia?—Yes.

How long have you been there?—Over 24 years.

(Mr. Holderness.)—You had both systems of piece and task-work?—Yes.

How did the piece-work rate compare with the average earnings of a labourer under contract?—On ordinary contract work people get from five to six annas a day. The piece-work rate was four annas three pies on an average.

That is, your rate was lower than the usual rates in Nadia?—Yes.

The rates in Nadia must be very high?—Yes, they are.

Are these regular professionals?—Yes.

You compare the results of piece and task-work. What is the conclusion you come to?—Yes, and the conclusion I have come to is that the piece-work system is more economical than the task-work.

Then under the piece-work system the D class people disappear?—There was not a single D class worker on piece-work. Some of the D class people worked with B class workers, having been taken into B class gangs by their B class relatives. People on task-work were never found to do a full task without hard pressure.

Do you think it is necessary in the interests of economy to put a limit on the amount of wage a man should earn?—No. I am not for recommending any hard and fast rule of the kind on piece-work. Unless people be allowed to have a free hand in earning they cannot, I think, be asked in justice to take charge of their dependants. My impression is, that on gang piece-work such restriction is not necessary. The system itself does not allow any particular worker to take any undue advantage if the gangs be large. Workers take in their weak relatives into their gangs, and as the earnings of a gang are divided equally among all members of it, practically the better work done by the abler members simply benefits the weaker ones who cannot work up to the mark. We tried to make large gangs of 100 each, but found it difficult to work such gangs with good results, as people did not live in camps and as a matter of consequence the attendance was always irregular.

It was difficult to set a task?—Yes; the task used to be set in advance, but as the gang never appeared in full number it had to be revised almost every morning. Then again some people came early and some late. This added no less to the difficulty in setting the task. The number of a gang was then reduced from 100 to 60, but this reduction also did not make it work satisfactorily. Gangs of 30 to 40 were found to work with good results in all respects.

In that way you could keep out the contractors?—Yes.

In this district did the women object to work?—Yes, except the aborigines.

Do the Sonthal women work?—Yes. It is the women of the Mahomedan, Hindu and other classes who have the greatest objection to work. These women cannot be induced to come to work. Even the coolies have a sort of *parda* in Nadia and they do not like their women to come out.

When you had task-work did you have very few women?—Yes, they were old and destitute.

(*Mr. Higham.*)—You were able to work your females in mixed gangs?—Yes. Bunah and Bagdee women worked in mixed gangs. Mahomedan and Hindu women of

other classes who were on the works, worked in separate gangs.

In gangs by themselves?—Yes.

Were women able to dig in gangs?—No. We gave them some old men to help them in digging, but this did not answer well. The women not being used to such work often met with accidents.

On task-work you were supposed to retain weaker people?—No. The order was to give occupation to all classes of workers on task-work, setting them a task in accordance with their working abilities.

What was the proportion of women to men on the works?—36·60 including children.

*Babu
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Sirkar.
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Written statements of evidence and written answers to the Commission's questions sent in by witnesses selected to give evidence before the Commission in Bengal, but not orally examined.

Written statement of evidence by Mr. A. FORBES, C.S.I., Commissioner, Chota Nagpur, dated 18th January 1898.

Mr. A.
Forbes.

The short time at my disposal admits of this note being as brief as possible. If more detailed information is required, I shall be ready to supply it, to the best of my ability, when my evidence is taken before the Famine Commission.

Point 1.—The provisions of the Famine Code were departed from in the districts of the Chota Nagpur Division during the late scarcity in the following matters:—

(a) Section 11 of the Code requires that test-works should be regulated strictly according to the provisions applying to relief works, both in respect of wages and quantity of work to be done. As, however, the rate of wage on relief works has to be fixed with reference to the existing prices of food, the result in time of scarcity and high prices is that the wage so fixed may be, and probably will be, higher than the usual rate paid by the Public Works Department or by the District Board: with the consequence that a wage on these lines would be unduly attractive even in ordinary years, and *a fortiori* no test at all at a time of high prices. The right principle seems to be that for the purpose of a test the work offered should be piece-work at a money-rate not greater than, but if anything distinctly below the usual rate, and for which the people will not seek work unless they are really in need. As soon as the attendance at the test rate proves that the people are really in want, it will be replaced by the prescribed relief rates, but not before. The system has the further advantage of preventing a rush at the beginning. The principle was followed in this division from the commencement of the operations, the test rate being fixed at first at an initial rate of Re. 1-4 per 1,000 cubic feet of earth-work: latterly, when a return to normal conditions was at hand, towards the end of the rains, test rates were again introduced at Re. 1-4, which was eventually reduced to only annas 15 per 1,000 cubic feet.

(b) The task-work system of the Code was not attempted on the relief works, all the works being carried out on the piece-work system for the reasons given in the following extract from this office No. 1080F., dated 24th December 1897:—

"2. During the late scarcity all the relief works in this division were carried out on the piece-work system pure and simple, excepting for some weeks at the commencement in Palamau. In that district, which was the first to start work, we began under the task-work system of the Famine Code, with this modification, *viz.*, that the rule [section 67 (1)] providing for a minimum wage was held in abeyance. This I considered to be necessary as, owing to the indolent habits of the people and their strong dislike to any form of regulated labour, the observance of the rule would probably have resulted in universal idling. The only difference, therefore, between the work as at first started in Palamau and piece-work pure and simple was that the rule limiting the quantity of work to be done, and for which payment was made, was for a time ordered to be observed. This restriction was, however, soon afterwards removed, as it seemed very doubtful whether without a very strong staff it could really be enforced, and it was also, I thought, practically a dead-letter in a part of the country where there are but very few, if any, professional labourers.

"3. There can, I think, be no doubt that piece-work is the system best adapted to at any rate the districts of this division. The advantages over the task-work system of the Famine Code appear to me to be these—

- "(1) It is understood by the people.
- "(2) It is very much more easily managed and with a much smaller staff than the task-work system. It also admits of the employment of contractors, a very important matter when there is a difficulty in obtaining a sufficiently strong engineering staff to take charge of the works.
- "(3) It lends itself to the formation of gangs and squads more readily and with less complications than is possible under the task-work system.
- "(4) It allows the people to come and go as they like. This is an important matter with a population of

cultivators, especially when the time for preparing their fields comes on.* It has always seemed to me a weak point in the Famine Code rules that they assume that the workers attend at the works during practically the whole working day, and require that they should be fined for short work. There seems no reason why, it having once been established by proper test-works that the people are in real want, they should not be permitted to attend the relief works as long only during each day as they find necessary in order to supplement their needs.

* In several places I found families at work after dark. They told me that they preferred this to doing earth-work during the heat of the day, and that they also had their ploughing, &c., to do by day. I thought them very sensible.

"4. I have said that the system is the one best adapted at any rate to these districts. I think this, *first*, because the people of these parts have an instinctive dislike to any sort of set work, and *secondly*, because they can most of them find a certain quantity of food in the jungles. Under these circumstances the minimum wage rule plays into their hands. They are satisfied if they get half a meal at the works, and, if they can get this without working, they won't work. The only thing, therefore, to be done is to pay them only for the work they do, and do away with a minimum wage. * * * The chief objection to piece-work is, I believe, that it gives some advantage to professional over non-professional labour. But I do not consider this a very serious objection. The professionals are men who have nothing but their daily earnings to depend upon. The bulk of the others, *viz.*, the cultivating classes, have credit and some stocks to help them through, and I think that late events, even in the worst stricken parts of Behar, have shown that their resources go a good deal further than was generally supposed. The cultivators as a class, it may safely be assumed, do not require to earn a full meal every day at our relief works. But the professionals do; so that the handicap is not, after all, so very unfair. It is not so certain, either, that the professionals lay themselves out, as a rule, to make undue profits. I doubt very much if they do, and at any rate the loss to Government cannot be very serious."

(c) Rule 67 (1) of the Code, providing for a minimum wage, was held in abeyance for the reasons given in (a) and (b) above.

(d) In a good many cases contractors (more or less petty) were employed on the plan recommended in this office No. 119F., dated 31st March 1897. This plan was found of great use in Manbhūm, where we were short of establishment. The arrangement with the contractors was that they should pay the workers at a prescribed rate per 1,000 cubic feet, receiving a commission which was fixed at 12½ per cent. on the amount paid by them in wages (all the works being of a more or less petty kind). The contractors financed the work (on advances paid to them at the Government treasury), measured the work of the different gangs, paid the workers, &c. All that the District Engineer with his staff had to do was to check the contractors' gross measurements and wage accounts, and to satisfy himself and the District Officer that the workers were being paid regularly and at the rates laid down. The contractors worked willingly and well. They were the ordinary local contractors employed year by year by the Road Cess Committee, and having for the time nothing else to do they were only too glad to keep their hands in in this way. I think that this plan might be adopted more generally for relief works. It brings into use a ready made local establishment accustomed to the work, and saves the Government officers a deal of trouble in connection with details.

(e) On most of the works, in addition to the piece-worker, there was also a "convalescent gang," consisting of weakly persons employed on daily wages, on light work such as breaking clods and "patting" the roads. This was at first regarded as an exceptional measure rendered necessary by the overgrowth of the gratuitous lists in one of the districts, but it was eventually introduced generally. It was found of much use, dovetailing in with the piece-works on one side and the kitchens (see below) on the other; it was also found

of much use, dovetailing in with the piece-works on one side and the kitchens (see below) on the other; it was also found

of particular use in giving employment to a number of women and children temporarily abandoned by the male members of their families who had gone off in search of work to Assam or elsewhere. These women and children could not often be found place for in the village gangs, who sometimes would not take them in.

(f) "Dependants" were entirely expunged. This was in the main a consequence of the piece-work system; the weakly persons doing what they could and being pulled through by the rest of the village gang or family squad to which they belonged, or placed in the "convalescent gang," those who are incapable of doing any work at all being put upon the gratuitous lists and sent to the nearest kitchen. There is a distinct administrative advantage, I think, in thus dealing with workers and non-workers separately. It leaves the staff in charge of the works free to give their whole attention to their own legitimate duties of arranging gangs, making measurements, payments, etc.; where petty contractors are employed it is the only workable plan.

(g) The kitchen system was made of considerable use in a manner not probably contemplated by the Code, *viz.*, both to replace the system of dry doles and also as a *test*. The system was first started on anything like a large scale by Mr. Herald, the Deputy Commissioner of Hazaribagh, in order to counteract the evil effects of an unimixed diet of jungle roots and fruits, especially in the case of children. It was afterwards introduced in Manbhūm as a *test* in consequence of the abuse there of the dry dole system. It was found that many persons not fit objects for gratuitous relief were clamouring for and getting dry doles, while many little children, fit objects of relief, were being robbed of their doles by the adult members of their families. The introduction of kitchens in place of dry doles put a stop to these abuses. I give the following extract from my report (No. 496F., dated 19th June 1897) on this subject:—

"26. The necessity of one particular reform presented itself very strongly to Dr. Rigby and myself, *viz.*, the replacement, so far as possible, of the weekly dole system by kitchens. We found at each place we visited a considerable number of small children, many of whom had been in receipt of doles for two months, but were still in an attenuated and anæmic condition. It was perfectly clear that their adult relatives had been living on these children's doles. The only way to put a stop to this, and to ensure the children being properly fed, is by making them come for their daily meal to a kitchen, and to eat it then and there. The kitchen system presents further advantages in respect of adults, *viz.*, first, that natives, even of the labouring class and with no caste scruples, are as a rule disinclined to eat cooked food in public, unless they are really in want and unable to work for a living, and secondly, that the officer in charge has more time and a better opportunity, when the recipients are quietly seated in rows waiting for or eating their food, of judging of each one's fitness to be placed upon or to remain on the gratuitous list, than when he is surrounded by a noisy mob of applicants."

Kitchens were therefore ordered to be largely opened under the following rules:—

- (1) Kitchens will be opened at the places marginally noted. At each, one or, if necessary, two paid cooks on R4 each will be employed, besides a mohurrir on R10.
- (2) All persons at present on the gratuitous lists, who are fit to do light work, will be made over to the sub-overseer, who must find them work in the "convalescent gang," if he cannot draft them into any of the gangs now working at piece-work rates.
- (3) Of the persons remaining on the gratuitous lists, all those who live within a radius of two miles from the kitchen, and can walk to it and home again without difficulty, must come to it for their daily meal each day, and must eat it *then and there*.
- (4) The only persons whose names will then be left upon the lists for weekly doles will be—
 - (a) persons who are unfit for any work at all, and who live over two miles from the kitchen;
 - (b) persons who are unfit for any work at all, and who, though living within two miles of the kitchen, are in such bad health that they cannot possibly walk to the kitchen and back for their daily meal.

I agree with all the District Officers who tried the plan, that the system worked excellently. Provided that cooks of a proper caste be appointed and other suitable arrangements be made, there can be no objection on the score of caste.* On the other hand, there is a strong preference amongst natives to cook for themselves, and probably 90 per cent. of the people would rather work for their living than eat food cooked by others, but they will eagerly take dry doles to save them from working.

In these districts, where our staff, as compared with areas, was necessarily a weak one, the work of supervising gratuitous relief had to be entrusted to a great extent to village committees. They proved themselves quite capable of managing kitchen relief, but the results in Manbhūm showed that they were quite *incapable* of supervising the distribution of dry doles without some self-acting test to help them.

Point 2.—As regards the degree of success of the piece-work system as worked in these districts, and the task-work system of the Code, in the matter of saving life, I am not in a position to offer an opinion, as we did not try the latter system. But there can, I think, be no question that the piece-work system is the less irksome of the two to the people themselves, and I see no reason why it should not be as efficacious in saving life as the other. It is naturally a much cheaper system, as it can be worked with a much smaller staff.

As regards the kitchen system *versus* the system of dry doles, I have no hesitation in saying that in these districts, where the chief want in time of scarcity is properly cooked and digestible food, the kitchen system is, as a means of saving life, in every way superior to that of dry doles. It was found that many of the people would not take the trouble to cook their doles, but ate them raw. Large numbers were little children who had no means to cook their food, besides being robbed of them as soon as they had left the relief centre. For these children the change was undoubtedly an immense benefit. As regards expense, the kitchen system is the more expensive in one way, for each kitchen requires its establishment of cooks, etc., but it is cheaper in another way, for it can be managed by volunteer committees (being its own test), whereas the distribution of doles *must*, as a rule, be supervised by well-paid circle officers. There will also be a material saving in the reduction in the number of applicants.

Point 3.—In connection with the various questions raised under this head, I beg to forward, in original, the marginally noted letters that I have received from the Deputy Commissioners of Hazaribagh, Palaman and Lohardaga, in reply to the report called for in Government order No. 897 ^{7 B.} _{Fam.} dated 10th November last.

On the subject of the recommendations made in Mr. Higham's report, dated 1st October last, which are discussed in these officers' letters, I beg to offer the following remarks. The first matter to be considered is the probable nature of most of the works that must form the back-bone of relief operations. The view put forward by Mr. Higham in paragraph 27 *et seq.* of his report appears to be that large works under the Public Works Department will have to be chiefly relied upon in future to provide the necessary employment. Small works coming under Mr. Higham's class IV are thought to be well nigh exhausted. Instances are given to show that the theory that the people will not go long distances in search of work does not hold good. A good deal has also been said—though not, I think, by Mr. Higham—regarding the usefulness of the "distance test."

It occurs to me very forcibly that in advancing these views sufficient consideration has not been paid to the fact that the great bulk of the people who have to be relieved belong to the agricultural classes, and to the necessary consequences of this. It is no doubt quite true that many of these people do often travel long distances in search of work. But sufficient attention has not, I think, been paid to the fact that they only do so *during the slack season, viz.*, immediately after the principal crop of the year has been harvested. This is not, however, the time of greatest pressure during a

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year of scarcity. The time of greatest pressure commences later, *viz.*, about the time for preparing the lands for the next crop, and the intensity increases until the cutting of that crop. Meanwhile the growing crop needs constant tending, weeding, irrigation, night-watching, etc. It will be found that the agricultural population never leave their homes in search of work elsewhere during this period. It would be a mistake to endeavour to induce them to do so in any year, and a great mistake after a year of bad outturn. The eagerness with which advantage was immediately taken of every passing shower to at once go off to their fields was a striking feature in last year's operations. In short there is no getting over the fact that the cultivator must be *on the spot* when the time for agricultural operations is at hand, and we have therefore to accept the position that work will have to be provided in the interests of the coming crop, *in the immediate neighbourhood of the villages during the time of severest pressure.* During the last scarcity it was in many cases all that the people could do, in their weakened state, to prepare and sow their lands. Had the ablest-bodied been away at the time, the lands would probably not have been cultivated at all.

I am unable to agree in the view held by Mr. Higham in paragraph 31 of his report, that the reserve of small works has been nearly exhausted. As regards the work on roads, Mr. Higham is no doubt right in thinking that the scope is narrower than it used to be. Much, however, still remains to be done in respect of village roads, and with every extension of the railway system there arises an urgent demand for feeder roads. Certainly in the districts of this Division there will, for many years to come, be plenty of road work available for relief purposes. But whatever be the case as regards roads, there is a practically almost unlimited demand throughout Bengal for improvements in village drainage and water supply. The best of tanks silt up in the course of a few years, and where new reservoirs or tanks are not needed there are still plenty to be repaired or re-excavated. In fact the improvement and upkeep of the local drainage and water-supply is a never-ending task in the interior of most Bengal districts. This is more particularly the case in the dry and dusty districts where both famine is most frequent and the silting-up process is quickest.

It appears to me that the questions of programmes of works and classification of labourers must be considered together. The labourers may be divided, in the first instance, into two broad classes, *viz.*—

I.—Professional labourers, *viz.*, persons of the *Dangar* (*Anglice*, navy) class who are non-agriculturists.

II.—Non-professionals.

Class II will comprise the whole agricultural population, such women and children of "professionals" as usually remain at home while the males go abroad in search of work, village artisans and others whose avocations keep them at their homes.

For class II we must make up our minds that the programme must consist of roads, tanks, and other small works within easy reach of the villagers' homes—works to which they can go for a day or half of a day, giving the other half of their time to their fields or other daily avocations. For class I large works, wherever practicable, should be provided, and to these works they should be sent, and not be allowed on the small works intended for class II. Of course if a large work of the kind referred to is within easy distance, persons belonging to class II can be required to go to it also, but in this case they should be employed in separate gangs and not mixed up with the class I workers.

As regards class I workers there seems no necessity for any sub-classification or for special tasks or rates. Full work will be taken from them, the rate per 1,000 cubic feet being the usual departmental rate, with such adjustment on account of the rise in the cost of staple food-grains as the Divisional Commissioner or the Local Government may in the case of each work consider necessary.

Class II will, however, have to be split up into sub-classes. Before going on to this subject it will be convenient to consider the broad lines on which relief operations should, in my opinion, proceed in future. These appear to me to be—

- (1) Test works at proper test rates.

- (2) Relief works on the piece-work system pure and simple, supplemented by—

- (3) "Convalescent gang" on daily wage, for weakly persons for whom places cannot be found in any village gang or family squad.

- (4) Gratuitous relief to be given, as a rule, at kitchens in the shape of cooked food, and only in exceptional cases in money or dry doles.

(Note.—I am not now concerned with special forms of relief, such as cotton-spinning, etc., for persons unaccustomed to manual labour.)

On the supposition that relief works are in future to be carried out on the task-work system, and diggers and carriers are to be separately paid, I see no objection to the subdivision of my class II into sub-classes proposed in paragraph 15 of Mr. Higham's report. But if the system is to be piece-work, I see no necessity for a separate classification of diggers and carriers. The whole gang or squad will do the digging and carrying between them, dividing the work as they please.

The only questions for decision are—

- (1) The proportion as regards (a) work and (b) wage to be borne by a woman and a child to a male unit. This has practically been decided. A woman is supposed as a rule to do $\frac{2}{3}$ ths the work of a man, and a big and small child $\frac{1}{2}$ and $\frac{1}{3}$ of the work of a man. The woman is ordinarily allowed $\frac{2}{3}$ ths and the children $\frac{1}{2}$ and $\frac{1}{3}$ of the full male ration. In case of a minimum wage the woman's wage is only $\frac{2}{3}$ ths or $\frac{1}{2}$ ths of the man's wage. I think that for the purpose of calculating the rate per 1,000 cubic feet of piece-work, the assumption may reasonably be made that the wage varies directly with the working capacity of each person. This being accepted the exact composition of each gang does not materially matter, provided only the officer in charge sees that the digging power is sufficient.

The next point for consideration is—

- (2) The number of male units (professional) ordinarily required to dig and carry 1,000 cubic feet (initial stage of lead and height) in one day. This is already well known to the Public Works Department authorities (*vide* column of remarks in Mr. Glass' tables).
- (3) The reduced standard to be taken in the case of famine labourers (my class II). This has already been decided for this Province at $\frac{2}{3}$ ths of the full standard. I understand from Mr. Higham's remarks that he proposes that this should be increased to $\frac{2}{3}$ ths, and I am inclined to agree with this, subject to the proviso that it be competent to the District Officer, with the approval of the Commissioner, to reduce the amount at any time to $\frac{2}{3}$ ths of the full standard.
- (4) The money equivalent of the daily quantity of food required at existing market rates to feed (2). This may be taken at 19 chattraks of grain per male unit, the present allowance in the case of B class labourers. This sum increased by one-fourth will then represent the initial rate per 1,000 cubic feet to be paid to the relief workers.

As regards the respective duties and responsibilities of Civil officers and Public Works officers, I think it essential that the principle laid down in paragraph 130 of the report of the Indian Famine Commission should be strictly preserved. Professional matters should of course be left to the Public Works Department, but all matters directly concerning the subject of relief, such as the rates of wages, the opening and closing of works, etc., ought to rest with the civil authorities, who are responsible for the general conduct of the relief operations.

Written statement of evidence by Mr. M. H. MACKENZIE, Manager, Rajkund Indigo Concern, dated Mozufferpore, the 26th January 1898.

I am in receipt of your letter of 18th instant, and, as desired, beg to give my views on the recent famine.

(b) The measures adopted were, I consider, fully successful in the relief of acute distress among all classes, and, so far as I am aware, there were few, if any, deaths from actual famine.

With regard to economy, however, I consider the administration is open to criticism. There were two classes of works being carried on at the same time, one under the Public Works Department, and the other under the Collector, in both of which the systems of payment were not identical. Whether the system of the male unit or of the digger and carrier be adopted, I think they are both equally open to objection in so far that they create an artificial method of payment for work, difficult for the workers to understand.

The more able-bodied are not allowed to do more than a fixed amount of work, and are consequently unable to earn more than enough for their own requirements, while those whom they would naturally support have to receive gratuitous relief. This gratuitous relief is the most difficult to check, and the heading under which there are most abuses, while I believe the expenditure is heaviest.

I believe that much cheating went on with regard to the money distributed for *parda nashin* women, but I cannot see how this can be avoided.

On the whole, I think the native officers in charge of works and circle officials worked well, and complaints were few and trivial.

(c) In view of any future famine I would suggest that a complete list of suitable works be made out to be ready for use. Roads should be surveyed and levels taken, irrigation channels laid out, old tanks requiring excavation, and sites for new ones noted, in order that when a famine does come

the available staff of engineers and surveyors may give their whole time to the actual execution of the work.

As far as possible the country should be divided up into blocks of about 400 square miles and a European Superintendent of a good class be placed in charge. A fairly comfortable house of sun-dried bricks and a grass roof could be erected, at a central point in the block, the cost of which would be very small.

Two to four relief works might go on simultaneously in each block and be within easy reach of the Superintendent. All earthwork should be paid for on the ordinary contract system without limit as to quantity.

Taking as a basis the ordinary Public Works Department contract rates, these might be reduced by about one-third, care being of course taken to see that the ratio between wages and cost of grain be maintained.

Gratuitous relief, except to *parda nashin* women, and cooked food in poor-houses should be abolished.

The poor-house should be established near the central bungalow.

If all able-bodied persons are allowed to do an unlimited quantity of work they should have no difficulty in supporting those dependent on them, while the work could be more easily checked.

As a preventive measure I think Government might give loans for the construction of field wells.

A *tile* well would cost about Rs50. After due enquiry this might be advanced, the loan to be refunded without interest in annual instalments of Rs10 or less. As from two to four bighas could be irrigated from each well, I believe ryots would readily take up the scheme with good results.

Mr. M. H. Mackenzie.

Written statement of evidence by Mr. R. CARSTAIRS, Deputy Commissioner, Sonthal Parganas, dated 28th January 1898.

Point I.—A special scheme was submitted for the working of relief in the Sonthal Parganas. The reasons for its submission were three:—

1st.—That we thought ourselves able to enlist local agency to a greater extent than the schemes framed for Bihar seemed to contemplate.

2nd.—The population being sparse compared with that of Bihar, we thought it necessary to provide a method of working cheaper, area for area, so as to keep it local, while not making it too expensive compared with the numbers dealt with.

3rd.—We have comparatively few men of education and good position to help the officials.

I remark that we met with considerable difficulties in bringing our work into order, some of which were local and some caused by circumstances beyond our control. Among the latter, I note the removal by Government, for duty elsewhere, of several of our subordinate officials, kanungos and Public Works subordinates, just at the most anxious time of our preparations. The former were replaced by men without local knowledge: the latter we found great difficulty in replacing by any sort of qualified men.

Among the former difficulties were the unready state of our work programmes, which ought to have been in much better order, and difficulty in organizing in some places a proper local agency.

Taking our local scheme all round, we have found by experience that it has worked well, and where it has not been satisfactory, that has rather been owing to defects in administration than to defects in the scheme itself.

2. The two things we had to do at the beginning were:—

- (1) to find out whether there was food in the district sufficient for local needs;
- (2) to find out how far State aid was necessary to enable the people to obtain it.

Our efforts at discovering what stock there was were a failure, and the only method we could adopt was to calculate from the data of area, outturn of crop, and food necessary for each individual.

This calculation was fairly well confirmed by events.

3. As regards the second object, we never found a supply of food to fail so long as money was forthcoming to buy it, and our efforts were mainly directed to protecting traffic and traders from robbery, fortunately with a fair amount of success.

The main problem of course was to convey the means of purchase to those needing help.

Of the various methods of employing labour, the piece-work system was found to be the best and to be very suitable for our local needs, namely, giving employment to persons accustomed to field labour.

4. Charitable relief was, under our local scheme, administered by means of cheque orders on selected circle "mndis," who gave food for the orders and cashed the orders at the sub-divisional treasury. This worked well, and in this way the whole business was done without money passing through local agency.

We had to simplify the classification of tasks according to hardness of soil. People were ready enough to accept higher rates for harder soil, but not so ready to go back to the lower rates for soft soil.

The forms of accounts were also improved and simplified by Government order. The alterations in forms gave some trouble locally.

5. It is impossible for me to give a detailed account of all the modifications made on the Famine Code. That will be found in our periodical and final reports. I will only add that our famine tests had to be reduced below those provided in the Code, as, had we followed the Code, the test wages would have been higher than the ordinary rate of wages, and we should have had the whole labouring population on our test works at once.

The charitable fund subscribed within and without the county was also a factor not contemplated by the Code. It had some effect on the working of our relief measures.

6. Coming to point (b), I have now to say what success we had with regard to the saving of human life, the relief of distress, and economy.

I have in my final report stated that I think too great a difference was made between areas in which famine had not been declared and those in which it had. There was often very little distance separating areas of the former class from famine, and difficulty of relieving distress which we knew to exist there was made very great by the restriction of expenditure

Mr. R. Carstairs.

Mr. R.
Carstairs.

and reduction of establishment. This was very severely felt in Rajmahal, where the kanungo and Public Works sub-overseer were both taken away.

I do not think it is possible to have complete success in coping with famine once it is on us. We may do a good deal for adults, but children must always suffer severely. It is impossible to protect children from their own parents.

The only really successful way of dealing with a famine is to prevent its occurrence.

I have in my report stated that I think this possible in this district by means which do not involve any expenditure, further than recoverable advances by the State.

These are :—

- (1) placing main roads on a commercial footing by making them self-supporting ;
- (2) compulsory protection from drought of the winter rice crop.

I am prepared, if allowed, to work my proposals, and think them practicable, and not likely to be unpopular.

7. With these reservations, I think we have had fair success in saving human life and preventing distress. The main difficulty, where any was felt, was caused by the apathy and helplessness of the people themselves. In this respect, the people of Jamtara contrasted favourably with those of Deoghur, greatly, in my opinion, owing to their having been much more practised in doing their own business including police work. In the neighbourhood of the shrine of Baidynath (Deoghur) the whole population seems to have acquired the beggars' whine and the beggars' spirit. One cause why we failed, as we did fail, to take the distress in time in the Deoghur sub-division, was the too free use by the Branch Committee of the Charitable Fund in giving gratuitous help to able-bodied persons. It suited those persons much better to accept charity than to work for wages, and consequently our test-works were not attended long after there was real distress. As soon as this was discovered, as it soon was, and the gratuitous relief lists were weeded of those who should not have been on them, our works were frequented and the mischief to a great extent was remedied. As the distress seemed undoubted, I dispensed with test-works in Deoghur, considering that any delay might cause loss of life, and so the lost ground was made up.

In one part of Deoghur the charge officer was not a success as an administrator. He had had no experience of executive work, and showed no great signs of capacity in that way. I have no proof that his slackness resulted in deaths. He needed, however, a great deal more time and attention than could conveniently be spared, and had to be helped out of difficulties instead of getting out of them himself.

I cannot say that we were able to relieve distress, especially among children. It was a painful sight to see the emaciated children who were brought by their parents and others to Government officers.

In Deoghur especially there was reason to believe that the parents often starved the children in order to excite compassion and get charity. There is no doubt also that children were often unable to digest food, while their parents could eat.

The kitchens which were started in Jamtara, Dumka, Rajmahal and Sahibganj out of the charitable funds did a great deal of good so far as they went, and this form of relief could have been greatly extended had we had the necessary supervising agency.

The chief difficulty felt was after the field work began in June, up to the time of harvest. People were more or less employed, when fit to work, by private employers, but those who were weak or had a little land were unable to get full employment. The relief works were little frequented, but I doubt if enough was done to help those in distress at the close of the operations. In fact I am of opinion that part of the legitimate work of the Government was thrown on the Charitable Relief Fund, which was fortunately enough to meet our chief necessity.

As regards economy I should think very few districts have done better than we have : we should have done our relief work much better had we had the agency which our scheme contemplated, but we worked far below that, and utilised the subordinate executive and even the judicial staff to help in the work.

The police were reserved for their own proper duties.

I would add that economy was greatly increased by the land improvement loans, which were of the greatest help in relieving distress in Jamtara.

The special rules could not be applied in Deoghur owing to famine having been declared there so late, but much work was done by means of loans under the ordinary rules.

8. Coming now to the point of advice for the future, I think the most important thing to do is to take preventive measures, and that, so far as my district is concerned, the best measures of this kind are to develop communications by making costly main roads self-supporting, and to prevent fluctuation of the winter rice crop by enforcing its protection from drought.

Local agency should also be made more efficient by developing Local Self-Government institutions.

9. Work programmes are defective, in that one main object of expenditure is the improvement of private tanks and reservoirs in villages.

State funds should be expended on State property, and not, except as loans, on private property.

I think the sites for suitable irrigation reservoirs should be selected and acquired, and plans prepared, and that such works, if made, should be made remunerative by selling the water.

Irrigation works should be made when it is found they are wanted, and not merely when work has to be given. The loss which causes famine may thus be prevented.

10. The expenditure on employment, especially to unskilled labour, should be increased, or at least not diminished in every part of the district. This would not in the end be an undue charge on Government or local funds, since it might often save the necessity of declaring famine. The expenditure on famine areas should be met from extra funds, and not by savings in other areas.

Similarly the staff should be strengthened, or at least not weakened, everywhere. The extra staff needed for famine areas should be made up by employing extra hands.

The transfer of men with local knowledge at such times should be avoided

Steps should be taken to increase the number of men qualified to draw plans, make estimates, lay out and measure works. There was great difficulty in getting such men this year.

11. More use should be made of contractors. I am not aware if it was the same elsewhere, but I noticed that the contractors, who are experts in the management of labour, were often sitting idle while we were paying men, not so well skilled, to do the kind of work they know. The difficulty of employing contractors is that they favour those who are strong and have skill, and give no work to those who are weak and unskilled. Our experience is that the main body of workers are strong, and will remain so if taken in time. The weakly may be drafted off into invalid gangs and specially dealt with, the contractor being employed on a reasonable percentage for profit to manage the rest. Probably it would be as useful a measure to leave labourers to be managed by contractors, as it has proved to leave the financing in the hands of the traders. It reduces the Government staff, and frees their hands for more urgent work. A percentage over the market rate at the greater markets should be fixed for payment to the small traders outside to cover the cost of their labour and risk.

12. It is of vital importance to simplify and reduce the work of accounts, since much of this work is incompatible with the efficiency of the actual executive work.

For this reason, piece-work, contract work, loans, and all means by which accounts to be submitted to Government can be consolidated, should be encouraged. Where Government agency is needed to supervise labour, a rough rate of remuneration should be fixed, and payment be made at this rate as far as possible to all. It would be well to class weak men as women, and weak women as children, rather than to multiply classes.

Soil should not be classified as hard, soft, etc., but the rate should be an average one, and gangs get fair play rather by shifting them from hard to soft than by altering rates. They are ready enough to take higher rates, but not so ready to go back to low ones. Working capacity is capable of expanding, and, given a sensible supervising officer, the rough rate is near enough.

13. It is very desirable that where there is any supplementary charitable fund the control of it should be in the hands of the Government officer, whoever administers it. Private charity must of course be left for private hands to

distribute; but any public fund raised and administered by a quasi-public body should be under the same control as the famine relief of Government. In the case of Deoghur I felt this very strongly. At Dumka it was practically controlled by me.

In case of such an organization in future, I think it very desirable that the Charitable Fund should provide an agency for managing kitchens to feed children. This was, we found, a most desirable form of charity, and it could not be extended for want of a suitable agency. Government might provide the kitchens and food, while the managers of the fund could select, maintain and house the Agents. A good deal of the Charitable Fund was spent in giving gratuitous relief to the sick and weakly, a work which can and should be done, by Government.

14. Finally, I urge the extreme importance of putting the work in the hands of thoroughly efficient men, and giving them a very free hand.

To secure the necessary number at the beginning, I would be inclined to indent on judicial as well as executive officers. These might be restored to their own branch after a time, being relieved if not needed, or replaced, if necessary, by others later on.

In most of my officers I was fortunate. In the case of one I learnt how much mischief may be caused by the employment of an incompetent man.

15. As regards the fourth point, I believe I have indicated most of the points which occur to me, and there is hardly time to think whether there is anything besides that I can recommend.

Mr. B. Carstairs.

Written statement of evidence by the REV. MR. T. W. NORLEDGE, Serampore, dated the 28th February 1898.

I have the honour to state that I do not think I could give any valuable evidence to the Famine Commission beyond that already in their possession.

Though I was Secretary of the Baptist Famine Committee in Lower Bengal, and was a member of the Jessore Local Committee of the Indian Charitable Famine Relief Committee, yet I had no personal work amongst really famine

stricken people. In Jessore widespread distress of varying intensity prevailed, but it was not sufficiently acute to induce people to join in large numbers relief works. The rate of pay for such work in Bengal should, I am convinced, be slightly raised. The rate that now exists should be continued for the North-West Provinces, but it is not sufficiently high for Bengal. This opinion is held I know by many Government officials in Bengal.

Mr. T. W. Norledge.

Written statement of evidence by the REV. G. C. DUTT, Missionary, Baptist Missionary Society, Khulna, dated the 3rd March 1898.

1. First of all I beg to tender my heart-felt gratitude to the noble English Government and to the English people in their highly favoured land, for their generous help rendered to the most distressed people of Kallygunge and Ashashony Thannas in this district through kind and sympathetic hearted Magistrate, Mr. Vincent. Our Magistrate, who used to be addressed by the famine stricken as *M* (mother), left no stone unturned to help the distressed in various ways. I am told that Mr. Vincent is to be examined or has been examined by the Famine Commission. I therefore have nothing to say about the relief work nobly carried by him in the above thannas.

2. While Mr. Vincent was engaged in the relief work in Ashashony, Kallygunge, etc., I, as a missionary, was engaged in helping the overflow of famine-stricken people who were wandering in the clearings of the Soonderbuns by giving them work for excavating tanks, and our well-to-do Christians helped them by giving them work to make roads, chapels, etc. When the rain commenced they got employment in the clearings of the jungle, the nature of which was cultivating or replanting the paddy. After the planting was over in the months of September and October or the early part of November, the agents of the zemindars and money-lenders left the clearings of the Soonderbuns, and the people were in a horrible condition, which pen cannot describe, caused by want of food, cloth and various diseases common in the Soonderbuns. I am thankful to our well-to-do Christian agriculturists for their timely help, and I made three successive tours to help the distressed by giving them rice, money, medicine, cloth, dal and sago, etc., which I informed from time to time to our properly constituted Famine Committee connected with our society (B. M. S.)

3. Towards the end of 1896 when famine was threatened, I made an application to the Commissioner of the Division, E. V. Westmacott, Esq., C.S., to the effect to lease the famine stricken lot called Kurrum Jal under the Forest Department, a lot believed to contain more than 15,000 bighas of land, on the terms that the people will give one-fourth or one-third of the produce, I mean paddy, to the Government, and they should live by cutting wood and selling them at proper price by paying reasonable tax to the Forest Department. Our Commissioner did not reply my letter. Again, when the famine became serious in the beginning of the 1897, I made another application with my European colleague, the

Reverend Mr. Tiggillus, through our worthy Magistrate, and in reply the Government stated that the plot of the jungle cannot be leased to the people because it is a plot where the soonderi trees grow in perfection. In reply I said that the soonderi trees can grow in other parts, and the Soonderbun is extending every year towards the sea, and if there be no extraordinary natural change, the Thannas of Kallygunge and Ashashony will be gradually converted into the Soonderbun forest. If my humble suggestion would have been approved and carried by the Government, the enormous expense of the Government in relief work would have been less, and the distressed people would have been benefited permanently. They could have produced paddy by cutting jungle and planting paddy by hand labour. Instead of telling anything more on the subject which is passed, I beg to make the following suggestions to the Government to prevent future famine in this part of our land.

First suggestion.—Henceforth let all arable land which the Government can lease be leased to the raiyats, the cultivators of land, on condition that one-fourth or one-fifth produce should be given to the Government instead of rent in cash. To sell by auction the lots in the Soonderbuns to the capitalists should be stopped.

Second suggestion.—In every town in the district there should be a *golaghar* to deposit grain to advance the agriculturists in the time when the crops fail.

Third suggestion.—A bank, naming people's bank, should be instituted in every town for the benefit of the agriculturists. The money-lenders everywhere fleece the poor raiyats by charging exorbitant interest.

Fourth suggestion.—The management of the rice collected instead of rent, should be in the hand of the District Board for lending and distributing when the crops fail.

In conclusion I beg to state that I have not time nor am I in a position to answer all the queries systematically in figures, partly for unreliable information, and partly to attend my important professional duties connected with our Mission.

I, with my helpers, helped about 1,500 men, women and children during the famine who are non-Christians. Our well-to-do Christian agriculturists helped many by giving rice and latterly by cooked rice, and they cannot say about the exact number thus helped. All is recorded in heaven.

Rev. Mr. G. C. Dutt.

Written statement of evidence by MR. P. C. LYON, Director, Land Records and Agriculture, Bengal, dated the 6th March 1898.

I shall endeavour in the following note to follow out the verbal instructions you have given me to be as brief as possible, and to avoid unnecessary repetition of statements and figures already on record. You are aware that I am personally new to the Department of Agriculture, and that I was unfortunately absent from India throughout the whole

of the famine year. You know also that Mr. B. C. Basu, the Assistant Director of the Department, who was in direct charge of all the statistical work connected with famine, and who was in constant communication with you throughout the year, has since been transferred on promotion to Assam. He has already given his evidence before the Commission

Mr. P. C. Lyon.

Mr. P. C.
Lyon.

(I enclose a copy of his printed note) and may be said to have spoken for the Department. I further feel that, as you were yourself the first Director of Agriculture in Bengal, held that post for six years, and have been in more or less direct control of it ever since, you are in a better position to speak for the Department than I am.

The statistical statements prepared in October 1896, and subsequently brought up to a later date, giving figures of rainfall, prices and the outturn of food-grains for the years 1873-74, 1888-89, 1891-92 and 1896-97 for certain districts in Bengal, are already before the Famine Commission, and Mr. Basu's Note on the outturn and stocks of food-grains in Bengal, prepared in May and June 1897, is also to be found in the published official correspondence relating to the famine.

I will take first the printed series of questions issued by the Famine Commission.

* 1 to 4 and 6. Mr. Basu has answered for the Department in these matters to a great extent. I may refer also to the statistics prepared in October 1896, and forwarded to the Government of India with Bengal Government letter No. 4549 Agri., dated 13th November 1896. These give full replies to the questions numbered 2, 3 and 4. There can be no doubt that the distress of the past year was aggravated by the fact that for two years before the crops in the affected tracts had been poor ones.

34 to 38. Mr. Basu has described the means by which information is obtained in Bengal as to rainfall, the state of the crops, and the area sown with each. It will be seen that, in the absence of any revenue village organisation, we are dependent to a great extent on the subordinate police and village chowkidars for our returns. It is notorious that these are untrustworthy in the matter of areas sown, but I believe them to represent fairly accurately the condition of the crops. I will note below some points in which improvements might be made; but in the meantime I may say, in reply to questions 37 and 38, that I believe that the information is obtained in time to be a guide as to the extent of distress to be apprehended in any year of failure, and that the statistics which were prepared by this Department from our forecasts and other returns in the autumn of 1896 were of great value in assisting Government to make provision for relief in the tracts in which it was subsequently required.

I will now record, as briefly as possible, a few suggestions for the improvement of our agricultural statistics, taken from various notes and papers in my office. They assume that the extension of the cadastral survey to the whole of Bengal, and the establishment of a patwari system, or any form of revenue organisation in the village, are not at present practicable.

- (a) There can be little doubt that our statistics of areas sown with various crops, whether they are shown as normal areas, or the areas sown in any particular year, can have little pretensions to accuracy except in districts which have been cadastrally surveyed. I have recently found that in a large majority of the districts of Bengal the areas taken as normal areas are really *maxima*, scarcely ever touched even in years of exceptional prosperity, and for the present I have been compelled to substitute for them the average areas returned as sown in the past five years, pending further enquiries as to the correct entries to be made. With our present organisation it is impossible to get accurate areas reported. All we can hope for is a fairly accurate statement as to the proportion which the area sown each year bears to the area sown in former years, and even then large extensions of area are often left unreported. Thus, when the jute crop of 1896 was under-estimated by this Department, and by all the commercial experts as well, the true reason was not that the prospects of the crop had been under-estimated, but that a large extension of cultivation of jute had escaped notice.

To correct these, we must undertake systematic enquiries in each district, and this means attention and care which cannot be given to the subject until we have an agricultural expert, or at least a Deputy Collector, set free to deal with these questions in every district. Given the necessary supervision, Mr. C. G. H. Allen, Settlement Officer of Chittagong, who was recently acting as Director of Agriculture in these Provinces, has prepared a plan for revising these areas, partly by the utilisation of the results of the survey of Government and other estates, and partly by local enquiries in selected tracts, which would probably result in a great improvement

in the accuracy of our figures. The proposals made by Mr. Allen can be further developed and laid before Government, if there is any prospect of our obtaining the staff necessary for carrying them out. In any case, I hope, by further enquiry into doubtful figures, and by local investigations, to be able to effect some improvement.

- (b) In the matter of the information received as to the state of the crops and their probable outturn, much can be done to improve them, if we can get more careful attention paid to them at the head-quarters of the various districts, and if we can have either expert opinion placed at the disposal of each Collector, or at least an officer detailed to assist him in preparing his reports and forecasts. It is clear that we should have information from independent sources to check that which is supplied to us by the local police. Mr. Mukherji, lately Assistant Director in the Department, has suggested that we should ask for information as to the state of the crops from all those gentlemen who now submit rainfall returns to us. Mr. Macpherson, Mr. Basu, and Mr. Banerjee (Assistant Director) have all agreed that we should seek the co-operation of District Boards in the matter, and should get the gentlemen composing these Boards not only to submit figures themselves, but to help in supervising the collection of figures by others. Finally, Mr. Basu, before he left the Department, made some carefully thought-out suggestions for the utilisation of *Panchayats* in this connection. Clearly, the first thing we have to do is to ascertain exactly how these returns are prepared at present, and how far the rules which have been laid down in the Manual of Rules for the Preparation of Crop Reports and Agricultural Statistics are adhered to. When this has been done, we shall be in a better position to judge whether any or all of the above reforms can be effectually introduced.

- (c) I have recently submitted to Government a report on the results of the crop-cutting experiments made in Bengal during the past three years, with my letter No. 356A., dated 3rd March 1898.

I have been unable to adopt the results of these experiments as a sure foundation for the correction of our existing figures of the outturn of crops, for reasons given fully in my letter and in the report, but amended rules have now been issued for the conduct of these experiments, and in a few years time, if these rules are carefully followed, and District Officers sufficiently supervise the work, we should obtain a fairly accurate basis to work upon.

- (d) Finally, one of the chief causes of such inaccuracies as have been detected in our returns hitherto has undoubtedly been the confusion introduced by the system of *anna* notation. The Government of India has now determined to supersede this by a system of percentages; but, up to the present, there has been a constant conflict between the Government instruction that "16 *annas*" means only an average crop, and the popular understanding that "16 *annas*" means a bumper crop. Mr. Henry, Inspector-General of Police in Bengal, has recently written—"No amount of iteration will make the chowkidar or writer-constable understand that a bumper crop can be more than 16 *annas*," and it is to this fact that the persistent under-estimating of the prospects of crops by District Officers is due. We can now, under the new system of percentages, make use of the *anna* estimates returned by local officers without confusion, and translate them into their proper values, and in this way, I hope that we shall avoid some of the errors into which we have hitherto fallen.

The establishment of agricultural classes at Sibpur, and the gradual introduction of passed students of those classes into Government service, will, I hope, slowly supply the want at present felt of all technical knowledge of, and interest in agricultural matters among the members of the Subordinate Executive Services. As I have noted above, it is impossible, in my opinion, to secure any uniform accuracy in our agricultural statistics until we have an officer of the status of a Deputy or Sub-Deputy Collector at the head-quarters of each district, especially instructed in the work of collecting these statistics, and given time and opportunity to examine them,

* The numbers refer to the questions drawn up by the Commission.

check them, and supervise the subordinate staff employed to collect them.

259, 260, 261. These have been fully answered by experts already. I have no special information to give on them.

262. Mr. Mukherji is of opinion that early marriage is, on the whole, not conducive to increase of population. The women lose their fecundity earlier, and the mortality among them is greater, while their want of experience and of care for their infants cause many deaths among the children. It seems probable that social reforms tending to postpone marriage will not tend to reduce the rate of increase of population.

263. Suppression of infanticide and widow-burning have not much affected Bengal, and sanitary improvements are only now beginning to reduce the number of deaths from cholera. But the extension of vaccination, and the efforts which have been made to relieve distress in years of scarcity, have undoubtedly tended to an increase in the population.

264. As to the increase of the area under food-grains, I would draw attention to the Tables of Agricultural Statistics published annually by this Department.

Such figures as are available show an increase in the area under food-grains from 48,634,500 acres in 1878 to 53,543,900 acres in 1896, an increase of about 10 per cent. During the same period the population has increased by nearly 20 per cent. These figures, although certainly only approximately accurate, confirm the general impression which exists among officers of experience in Bengal that the area under food-grains has not increased *pari passu* with population. Moreover, during the same period, the area under non-food crops has increased from 6,011,200 acres to 9,759,000, or a rise of nearly 62 per cent. A great proportion of this increase is due to the rise of the trade in jute, the extension of the area under jute having been very marked of late years. In some districts in Bengal jute now occupies land which used formerly to bear a rice crop, and the area is still increasing.

Improved methods of cultivation have as yet had little or no effect upon the food-producing capacity of the land, and, although irrigation has certainly done much to protect cropped lands and to increase outturn in the areas to which it has been extended, those areas are as yet small in comparison with the total area under cultivation in the Province.

265. There has undoubtedly been a considerable rise in the general level of prices. This is due to some extent to improvements in communications, in consequence of which the prices of many of the principal food-grains are regulated by the wants of distant communities; in some cases, by the prices ruling in Europe. But the real reason why the export trade in Bengal is still very small would appear to be that the wants of the inhabitants of the Province itself in the way of food-stuffs have increased so seriously as to keep pace with the rise in prices, if not actually to help them up. With no facilities for export at all, there can be little doubt that prices would have risen in the past 20 years very considerably.

266. There has been no rise in wages in any part of the Province commensurate with the rise in prices. In Eastern Bengal there has been a rise, and it is a fact that in Backergunge and Noakhali the status of the poorer cultivator, and of the formerly landless classes, has so much improved that coolies are not now to be procured for any extensive public works. But in Behar and Orissa, especially in the areas which are held liable to famine, there has been practically no rise in the rates of cash wages. Day labourers are frequently paid in kind and not in cash, and their wages may be said to have increased, although the actual payments in kind have not risen, but the cash wages of other labourers stand now practically at the rates at which they stood 20 years ago, while prices have risen by 20 per cent. or more.

267. The rise in prices has undoubtedly increased the prosperity of the agricultural classes throughout Eastern Bengal. So much so, that there is a greater tendency now than formerly to employ immigrant labour on the fields, and there are fewer local labourers to be found. The constant influx of labourers from the west, men who come in for the harvesting and return to their homes when their work is done, tends to keep down wages, while, at the same time, it is an indication of the growing prosperity of the cultivators. It would seem to be the universal opinion that the higher prices that have recently prevailed have conduced to a reduction of the amount of stocks in the country. Exports have increased, and the increase in population has also raised the demand. At the same time the development of the grain trade in the interior has promoted the free circulation of produce, and the result has been that the bania now keeps the stocks in the place of the cultivator. I am doubtful

whether the numbers of the labouring classes have increased at the same rate as the increase in population would suggest. In many parts of Bengal, the land is being divided up very fast into small estates and small holdings, and there is a very large increase annually in the number of persons who are direct sharers in the profits of cultivation.

268 and 269. I am not of opinion that irrigation and improved methods of cultivation are likely to have the remote effects suggested. The great advance in prosperity made in Eastern Bengal of late years does not, I think, support the theory that the growth of population is intimately linked with the variations in the amount of food available for its support.

270. Something may be done by emigration, but this can never be the relief to India that it has been to England. The numbers are too vast, and there is too little enlightenment to enable the majority of the people to take advantage of even those openings for emigration that exist. But, at the same time, the annual emigration from Saran to the east for labour, the emigration for service of various kinds from Orissa to Bengal, and the small exodus of coolies to Assam and to foreign countries, all have their effect in reducing the pressure of population in the over-stocked countries left behind.

271. No.

272. I do not think that any equilibrium such as is described, will be established by the means suggested.

273 to 281. I understand that the Commission has already accumulated a vast amount of evidence in reply to those questions. With regard to them, Mr. Mukherji, Assistant Director, writes:—

"Questions 273 to 281.—The ordinary food-grains used by the people of these provinces are, according to their relative importance, (1) Rice (38,983,000 acres, or about 60 per cent. of the cultivated area), (2) Maize (2,401,400 acres, or about 3 per cent. of the cultivated area), (3) Wheat (1,472,000 acres, or about 2½ per cent. of the cultivated area), and (4) *Mandua* (963,500 acres, or about 1½ per cent. of the cultivated area). The food varies not so much with the season as with nationality and position in society. Pulses and mahua (*Bassia latifolia*) flowers are used for seasoning, as also sags, fish, tamarind, etc.

"In famine times poor people avoid as much as possible eating the ordinary grains, and depend more on cheaper foods for their nourishment. In Murshidabad, during the worst month, *viz.*, June, the poorest in the affected tract depended largely on *palwals* and marsh melons. Sweet potatoes (*Batatus edulis*) and *sajna sag* (*Moringa pterygosperma*) were also largely used. The millets that ripen early in the season were also more largely grown and eaten in July and August. *Arahar* not having suffered so much as other pulses, boiled *arahaar* was also eaten by many people during the cold months in place of rice.

"In Lower Bengal, the poorer classes usually have three meals a day. Early in the morning they have either *pantābhat* (stale rice soaked in water) or *muri* (fried rice) before they go out to work. In the middle of the day, *i.e.*, about 2 P.M., they have a cooked meal of rice seasoned with *dal*, vegetables and sometimes fish, and at night they have another similar meal.

"The millets, except *kaon*, are considered rather unpalatable, *arahaar* is considered somewhat indigestible, so are marsh melons. Sweet potatoes, yams, *ól*, and *palwal* are considered nourishing. *Sajna sag* and other sags are considered hard of digestion. *Kalai chapatis* (which were also a common substitute for rice in Murshidabad) are considered particularly light and nourishing. *Singáras* (*Trapa bipinosa*) which in the marshy places of Rajshahi the people dependent largely upon in the worst time of the year, are considered very light and nourishing.

"In most parts of Lower Bengal, people object to eat maize, thinking it is indigestible. Ordinarily, poor people do not eat what they have never been accustomed to eating; but if such foods were cooked and served out in poor-houses in times of severe famine, I dare say they would eat them. Burma rice, which is by no means inferior to the coarse rice of the country, sold a seer cheaper per rupee in Murshidabad owing to the unwillingness of the people to eat anything they are not accustomed to. I doubt if, without special effort, roasted tapioca roots will be eaten even in years of famine, though they are good to eat and quite wholesome. But special effort in this direction of making the people take to what may be called "famine foods" is very essential, and the growing of famine foods, such as tapioca, *sátui ólu*, Jerusalem Artichoke, *ól*, etc., that stand drought fairly well and yield large crops, should be a special feature of the experiments conducted by this Department.

Mr. P. C.
Lyon.

Mr. P. C.
Lyon.

"Kitchens and poor-houses should, I think, be discouraged as much as possible. We did this to the last and avoided having any poor-houses or kitchens in Murshidabad. Money-doles should not be discouraged, as people can often make better use of their money than famine officers, by buying cheaper foods than the grains used for relief operations. A pie or two would give a full meal of boiled *palwals*, sweet potatoes and marsh melons, while 2 annas worth of ordinary grains at famine rates would, under certain conditions, scarcely suffice. It is also much easier controlling money accounts than grain accounts. Complaints are common in kitchens and poor-houses of the dole being insufficient."

Mr. Banerjee writes in answer to questions 273 and 274:—

"Questions 273 and 274.—While engaged in making special enquiries in the district of Cuttack, I found that the well-to-do labourers had generally three meals. One they had in the morning before going to their work. This consisted of parched rice or rice soaked in water the previous evening. At noon they had their second meal, consisting of boiled rice, some curry of fish or vegetables, when available, and some pulse gruel (*dal*). The evening meal was very much the same as the midday meal. What I found in Cuttack applies to Bengal Proper. *Satu*, which is a particularly nutritious food, takes the place of parched rice in Behar.

"Rice is the staple food both in Bengal and Orissa. In Behar, besides rice, barley and maize are also consumed largely, and in Chota Nagpur maize and mahua are eaten besides rice. Millets also form a part of the staple food of these Provinces.

"In Bengal and Orissa, rice is eaten throughout the year. In Behar maize and millets are mostly consumed after the *bhadoi* harvest and up to the time of the *aghani* harvest, when rice takes the place of these cereals. Water alone is generally drunk at all meals."

Questions 292 and 293.—Mr. Basu has given the experience of this Department in his replies to these questions, and in his notes on food-stocks in Bengal, has given detailed figures for all districts. There seems to have been no unreasonable panic or wild speculation in the grain trade during 1896-97, and the high prices at which food-grains have sold, almost up to the close of 1897, in spite of a favourable *bhadoi* harvest and excellent prospects for the winter rice crop, appear to show that the causes regulating them were natural and not artificial.

The remaining questions have recently been the subject of special enquiry and report; and Revenue Secretary has previously instructed me that it was unnecessary for me to make further enquiries into the matters dealt with in them for the purposes of this report.

I append a note in *manuscript by Mr. Mukherji, on the subject of famine relief.

I now turn to the special subjects to which the Famine Commission have called the attention of the Department, and with reference to these I have little to do but to refer to the reports and notes in which the results of our enquiries on these subjects have already been embodied.

1. *The areas cultivated for food and non-food crops in the Province, with an estimate of the normal outturn of food crops and of the normal value of the non-food crops.*—I can only refer to the Agricultural Statistics published by this Department. These give full details. The total figures of average area are:—

	Acres.
Under food crops	51,300,000
Under non-food crops	9,700,000

As pointed out in the reply to question 264 above, there has been a large increase in the area under non-food crops in the past 20 years, mainly due to the extension of the cultivation of jute. There has also been a considerable increase in the area under tobacco. The question of the outturn of food crops was gone into very carefully by Mr. Basu in his Note on Food-stocks, already referred to, and I have nothing to add to his conclusions.

I am unable to give any estimate of the average value of non-food crops.

2. *The population in 1871, 1884, 1891 and 1897.*—The following are the figures of population asked for:—

1871	60,443,775
1881	66,691,456
1891	71,346,967
1897 (calculated at the same rate of increase)	74,179,000

3. *The increase of the area under food and non-food crops since 1871.*—This question has been dealt with in the reply to question 264 above. As explained in the earlier part of this note, our figures are barely approximate, but the proportion of the increase is probably fairly correct. In those parts of the Province in which population is most dense there is little room for extension of cultivation.

4. *Estimates of the food and seed-grain requirements of the Province.*—I would refer again to Mr. Basu's Note on Food-stocks, in which this question was fully gone into.

5. *Information as to the food exports and imports of the Province during a series of years.*—I understand that these figures have been compiled in the Statistical Department, in which Department all the figures available on the subject will be found. I have not, therefore, compiled any separate statistics.

6. *Information as to the extent to which the harvests of 1896-97 were below the normal, and the food products of the year below the requirements of the Province.*—This information was given in full in the statistics prepared in October 1896, and subsequently completed for the harvests referred to, and in the Note on Food-stocks written by Mr. Basu. I understand also that the subject is fully dealt with in the Famine Report, the figures in which have, I believe, been largely taken from statistics provided by this Department. It seems unnecessary, therefore, to repeat the information here.

7. *Extent of imports of Burma rice.*—In ordinary years the import of Burma rice is purely nominal. Revenue Secretary has already obtained figures for 1897, and has, I understand, incorporated them in his Famine Report. They are not available in my office.

8. *The extent of cultivable land in the Province capable of being brought under cultivation.*—I much regret that the imperfection of our agricultural statistics prevents my giving any reply to this question. It will be seen from the Agricultural Statistics published by this Department that the cross-heading for cultivable waste available for cultivation has not been separately filled up for the larger number of districts, the figures having been amalgamated with those for other waste lands. It would be useless to make an estimate from the materials at hand.

9. *Any evidence there may be that improvement in communications has not only facilitated distribution, but also stimulated production.*—I am afraid I have no evidence to offer. Were our figures of area in our Agricultural Statistics sufficiently reliable, we might have been able to give some, but we cannot deduce any conclusions from them on this point.

10. *Any evidence there may be that by means of more intense methods of cultivation, such as more manure, water and double cropping, the land is made to yield more than it did.*—I can give no general evidence beyond such as is afforded by our statistics of the area under each crop. It is a general conviction among the cultivators, in those tracts which are not liable to inundation, that the land yields less than it used to, and it would seem probable that, owing to want of manuring, there has been some exhaustion of the soil in many districts. While little has been done to improve the systems of manuring in Bengal, rotation of crops is in some districts intelligently carried out, and there is evidence in parts of Behar of a considerable extension of well irrigation. In Behar also the area under *radi* crops is increasing, owing to the extension of the practice of utilising rice lands for leguminous crops and even for indigo, after the winter rice has been cut. Should the Commission wish it, I will see what definite statistics can be compiled in our office to illustrate this.

11. *The extent to which prices and wages have risen of late years in different districts.*—I have not compiled fresh statistics on this subject, as Mr. Basu has already compiled figures of prices for the districts affected by the recent scarcity. But they are to be found in the publications of the Statistical Department, and can be quickly compiled, if necessary. There can be little doubt that cash wages have risen slightly in Eastern Bengal, but have scarcely changed in Behar or in Orissa. In North Behar this fact is notorious, and, although some labourers are paid in grain, there are many others paid in cash.

As to the rise in prices I have by me a few figures which will show how freely prices have risen in the past three years throughout the Province, irrespective of local scarcity.

DISTRICT.	Average price of common rice in acres to the rupee.		
	1895.	1896.	1897.
1	2	3	4
Cuttack	21 3	18 5	11 13
Puri	23 8	19 2	11 5
Balasore	31 5	16 12	12 0
Manbhum	19 13	14 6	10 4
Midnapur	18 7	15 11	10 1
Burduwa	16 15	13 11	9 5
Noakhali	17 10	11 12	9 11
Muzaffarpur	14 3	12 2	9 0

12. *The extent to which the resources of the people to resist famine have increased or diminished.*—This matter will be fully dealt with in the reports on the recent famine, and I do not think I need dwell at length on it here. There is much evidence of increase in prosperity throughout the Province. Of these the most notable appears to me to be the sub-division of landed property, and the acquisition by formerly landless classes of an interest in the soil. The rise in prices and the improvement in communications have at the same time opened fresh markets, and while the former has induced greater economy in consumption, the two combined have brought more profit into the hand of the cultivators. The jute, indigo, and opium industries have all had a share in improving the financial position of the cultivators, and of late years, the tobacco and potato crops have proved very profitable in North Behar. But I understand that cumulative evidence from many quarters of the actual experiences of 1896-97, when prices rose to a previously unknown level, and a series of bad crops had impoverished the people, will strongly support the theory that the resources of the people to resist famine have increased.

13. *As to the extent of our knowledge of the grain stocks of the Province, and as to the minimum number of days' supply likely to exist in it in a bad season.*—Our knowledge is very small. The matter has been dealt with very fully in Mr. Basu's Note on Food-stocks already referred to.

Mr. P. C. Lyon.

14. *As to whether the practice of storing grain in large quantities for long periods is dying out among the cultivating classes.*—This subject has been largely discussed elsewhere, and Revenue Secretary will have much evidence before him on it. My own impression is that it is dying out, that the raiyats realise the cash value of their crops more speedily than they used to, and that they invest their cash freely in purchase of land, in building and the like, or in unprofitable expenditure on marriages and other ceremonies. Of course, there are many cases in which hoards of grains were discovered by the last famine, but the cultivator now-a-days would appear to hoard money more than grain, and to leave the baniya to supply him with food-stuff when he requires it.

15. *As to the possibility of averting famine in any part of the Province by irrigation works or other measures for increasing the production of the soil.*—Doubtless much has already been written on this subject. To take North Behar, I believe that a great deal might be done by the systematic storage of water in the Terai in North Champaran, and that the same might be done to a great extent in North Muzaffarpur. In other parts, I believe that there is much room in Behar for the extension of well irrigation, and for the introduction of new food crops, such as potatoes, English and native, and other root crops, into districts in which they are at present little known. The Agricultural Department may hope by slow degrees to introduce more economy in the use of manures, and to persuade cultivators to take means for their conservation. At present a vast quantity of useful manure is allowed to run to waste. In other parts of the province there is something to be done in reclaiming waste diara lands, and in clearing tracts which are at present malarious, but could be rendered habitable. In accordance with the recommendations of successive Agricultural Conferences, this Department is engaged on the compilation of analyses of various districts in which this question will be examined separately for each district.

Written statement of evidence and written answers to the Commission's questions by the REV. J. P. MEIK, Pakur, Sonthal Parganas, dated 7th March 1898.

Rev. Mr. J. P. Meik.

Though there was no case of death from actual starvation, there was distress more or less severe all over the Pakur Sub-division, and a few persons died from disease caused by want of sufficient and proper food.

Pakur was not declared a famine district, and very little in the way of Government relief work was undertaken. A few hundred rupees were given from the Charitable Relief Fund, and about Rs. 3,000 were sent to me from Missionary and other funds from England and America.

I gave very little as gratuitous relief. I employed men and women on earth-work, walls, clearing tanks and removing jungle and planting trees, and the children in picking up stones and weeds; I helped weavers in making cloth. The old men and women and the sick and incapable received gratuitous relief of from two to six pice a day. In this way I was able to employ and help from 200 to 260 persons a day.

The villages in this sub-division were divided into circles of from 30 to 40 villages in each. I had charge of one of the largest circles. I do not think that I was able to help all who needed help, but I helped all whom I possibly could and all who were willing to work.

My experience in the little that I was able to do is given in my answers to the questions issued by the Commission.

- *1. I cannot definitely state.
- 2. Partly to the local failure of the rains and harvest, but more especially to the high prices.
- 3. The price of rice was from one-half to twice as much as in other years, and, I believe, higher than in past famines.
- 4. In some sections of the country the rains had been favourable and in others the reverse.
- 5. Yes, I think under normal circumstances the population of this district may enjoy a fair measure of material well-being. There are a few persons in nearly every village

who have no trade and are dependent for their daily food upon their daily labour, and when they cannot get work or the prices of food-grain are very high, they suffer much.

6. The agriculture of this place is entirely dependent on timely and sufficient rain. There are no facilities for irrigation.

7. It is impossible to say definitely. I should say that about one-half of the population has no such reserve.

9 I do think that the degree of distress was somewhat under-estimated. If relief had been given sooner, it would have prevented many from selling their cattle, lands, etc.

10. In these parts the number did not exceed 5 per cent.

12. No.

13. It is very difficult to give relief to some people. Rather than work at reduced rates they will first spend and eat up all they have stored away; second, they will borrow all they can get; third, they will sell all they have; fourth, they will sit and starve as long as they can and see their children suffer before they will turn to work for wages they consider less than they should get, and when they are at last compelled to work they are too weak and sickly to do much.

18. It has been in Pakur.

19. At Pakur they were required to do a reasonable amount of work as a condition of receiving relief.

20. Yes.

21. When the labour-test was applied the number that received relief was small compared with the number who applied for relief.

22. Yes. Yes. No.

27. Doles of grain and money to persons in their homes and at centres. I am speaking of Pakur.

* The numbers refer to the questions drawn up by the Commission.

*Revd.
Mr. J. P.
Meik.*

29. Very little gratuitous home relief has been given to people in this sub-division. They did not need much. The people are always ready to accept charity.

31. I do not know of any loans or suspensions and remission of rent granted by zemindars to their ryots.

32. I believe most of the people will soon recover their former position.

34 to 38. It is absolutely impossible to ascertain the true state of the crops or the area sown unless the Magistrate or Sub-divisional Officer goes out personally to inspect. For it is impossible to get the facts from the people themselves or from native subordinates.

39. I cannot speak about what was done in the whole of this sub-division. I can tell of what was done at Pakur. A few hundred rupees were given from the Charitable Relief Fund for the relief of the distressed people. I spent Rs. 3,000 and about 300 maunds of Indian-corn and beans in providing relief for the people. I gave very little as gratuitous relief. I employed the men on earth-work and buildings, the women in clearing jungle and planting trees, and children in picking up stones and weeds. I helped weavers in making cloth; some old men and women and sick people who could do no work received gratuitous relief of from 2 pice to 6 pice a day. In this way I was enabled to employ 260 persons some days. I had between 30 and 40 villages in my charge. I do not think that I was able to help all who needed help in these villages, but I helped all that I possibly could and all who were willing to work.

71. They will go if they can return to their villages at night.

72. Sometimes the wife and children or mother or some one else cannot or will not go to relief works at a great distance, and they are dependent for their food upon the earnings of the man. In such cases it would not be just to withhold relief from the able-bodied man who refuses to stay away from his family at night. When the woman and children can go to the relief works with the man, they may be taken long distances, but there will be many cases where the women and children cannot go from home without ruining the family and destroying the home; for such cases work near home will be necessary.

85 and 86. I did most of the work here by piece-work. Piece-work was the most satisfactory. I found it simple waste of money to pay the people by the day. All the men and women on earth-work, mud houses, tree planting and jungle-clearing were paid by piece-work. They earned sufficient money and did good work. Those who were too ill or weak to labour enough to earn sufficient, I paid reduced wages, but sufficient to buy food and employed them on light work, such as removing stones and picking up weeds, dressing roads, picking up cow-dung, etc.

89. When I found the people earning more money than they needed for the support of themselves and family, I employed them only every other day or 3 to 4 days in the week only. I did no work on Sundays, and they got no money for Sunday.

91. Yes, I have received many such complaints, especially when the gang has been a large one. There is not much trouble in small gangs. I prefer here a number of small gangs of from 12 to 20 each.

93. I do not think there will be any difficulty.

95. I used to give able-bodied men from 10 to 12 chittaks of rice, 1½ to 2 chittaks of dal or 8 chittaks of atta and 1½ to 2 chittaks of dal.

Women 8 chittaks of rice or 6 chittaks of atta and 1½ chittak of dal.

Children under 10 and above 5, 6 chittaks of rice or 4 chittaks of atta and 1 chittak of dal.

Rice and dal and salt, or atta and dal and salt was all I gave them when I gave grain instead of pice, and I found it was all they needed.

103. When the people work by piece-work and get full wages I would not give them anything for Sunday.

114. Road-making, planting trees on roadsides, clearing jungles, making bricks, gathering limestone, digging wells and tanks, canals, etc. The bricks and limestone can be sold to the public. Wells and tanks can be dug for people who should be required to repay the actual cost of labour according to the *tacavi* system.

124. I have always found the daily payment system the best. By paying the people every day, it prevents them from borrowing or taking things on credit. When I paid at the end of each week, I found the people were borrowing on high interest and buying at higher rates on credit.

Some kept the money they got and did not pay their debts. When they were paid daily, people refused to lend them money, and the shop keepers refused to give credit, because they were afraid the people would use up the pice they got every day and they could not recover their money, and this was a blessing to the people.

126. When I paid the men through my muharrirs or siraars I found that the people did not get all their money, so I made the people divide into gangs of 20 or less and select one of their own number as gang man or duffadar and the money was paid to this duffadar in the presence of all the other duffadars. This stopped a lot of fraud.

148. I gave gratuitous relief to only old and infirm people and to children who were unable to work or had no relatives able to support them.

149. In ordinary years these people live by begging, clearing the houses of the better class of people in the villages, gathering cow-dung and fire-wood and husking paddy. When there is severe distress in the country the people who used to employ these old and infirm women and men and the homeless women and children, are compelled to do their own household work and prepare their own dung-cakes and husk their own rice, and the poor people are unable to find work. As the distress grows in severity the numbers of these people grow larger. The people who suffer most in this way are the poor women and children of the villages.

156. If the able-bodied relative were able to support his incapable relative, I would make him support him, but in some cases one able-bodied man had three or four incapable relatives to feed and was utterly unable to do so.

157. Yes.

159. Yes.

160. No.

161. Yes.

162. Yes.

163. I found it very difficult to get landowners to do anything to improve the tanks or roads. They would do nothing unless compelled to.

167. I gave both as occasion required. I prefer giving grain.

168. I made them come to a central place and receive the money or grain. In some cases I sent relief to their homes.

169. It is almost impossible to find subordinates who will not take advantage of the people's distress and their superior's negligence, to fill their own pockets.

172. We had no poor-houses here, but I took about 40 destitute children and fed and clothed them during the period of distress.

185 and 186. I made most of the people who wanted relief come to my house at Pakur, and all who could work I set to work, such as digging, clearing jungle, picking up stones, gathering lime, breaking stone, cutting grass, sweeping and such work as they were able to do. I made some work only 3 hours, others 4 and 6 hours. I had about 40 villages in my circle.

201. I would have liked to have some more advances made to cultivators for seed grain and purchase of cattle.

205. It would be more economical to aid by such advances persons who have property and employ labour than to require them to go on relief work. If a man has land and cattle and does his own work, he should be made to work even if a small loan were given him for seed grain.

206. Everybody would want to borrow, but great care should be exercised in granting loans.

I believe the zamindars and large landowners should help in giving loans to their ryots. Government should not be required to do all.

207. I am unable to say if Government suspended or remitted revenue. But I am certain the zamindar not only did not suspend or remit any rent but took advantage of the ryots' distress, and sued for rents and sold their holdings. Within the last 2 or 3 years some of the ryots have lost all their lands. The lands have either been sold by the zamindars for recovery of rents or the ryots have borrowed and transferred their lands.

212. When a zamindar does suspend rents, he charges interest at 25 per cent. and also compound interest. This ought not to be.

213. Yes, it is necessary.

214. Yes, remission.

220. The orphans should be made over to private orphanages and Christian Mission orphanages. Government should maintain a strict supervision over the orphanages where these children are placed and see that they are properly cared for both physically and morally.

221. I think District Boards and Municipalities should aid in the support of such orphans. Government should continue to give aid until the children are able to earn their own living, *i.e.*, until the boys are 16 years of age and the girls are 14 years of age.

222. I am opposed to giving gratuitous relief to any person who can work. Gratuitous relief should be given to orphans and destitute children, old and infirm men and women and sick or incapable persons only. But when a person is able to work he or she should be required to do so and receive no gratuitous relief. I am opposed to giving free grants to agriculturists for any purpose whatever. When necessary, money should be given to him as loans without interest to be paid back in from 3 to 6 years. I would grant such loans to agriculturists for seed, purchase of cattle and implements and for cultivating their lands and make them pay back the loans according to agreement. The money thus recovered should be used for the support of orphans' hospitals and giving loans again to needy agriculturists.

232. This fund could be applied in giving loans to weavers to enable them to buy cotton, and to traders to enable them to import food-grain and sell at reasonable prices.

235. We received only a small sum from this fund for relief in this place.

259 to 263. I believe the population has increased a great deal, though I have no figures before me. I certainly believe the causes affecting this growth of population are those mentioned in paragraph 263.

266. Yes.

267. I should say so.

268. They would.

269. Emigration is the only remedy I can think of.

270. Yes.

271. Not in the least degree.

272. I think it might be tried.

273. *Rice is the principal food of the people here. They also eat a good deal of Indian corn, wheat, and kullai dal.*

274. The labourers have three meals a day. In the morning they have a meal of rice or Indian corn. In the middle of the day they have a dry meal, such as paroled rice, corn, gram or bread made from wheat, rice or corn flour. At night they have a hot meal of cooked rice, dal and some sort of curry. The better class of people have three meals also, but they take a light meal in the morning and a heavy cooked meal in the middle of the day or at night. The better class of people drink a lot of milk, and some have taken to tea. The poorer class drink water; some drink a lot of toddy or rice liquor.

282. I think there was grain enough in this part of the country to supply all demands, but the high prices were due to speculation in a great measure, or panic in some cases.

284. Yes.

285. A lot of people sold all their grain in order to get high prices then prevailing, but they had to buy food-grain again at higher prices than they got for their stock.

Retail dealers sold from 6 to 12 per cent. higher than wholesale dealers did.

286. In some villages the people could buy no food-grain. In others they had to pay 25 per cent. more than in the bazar.

290. There were surplus stocks of food-grain. Some people sold as the prices went up, others sold a part and retained a part.

291. Yes.

292. I don't think so.

294. Yes. Yes.

296. To the labouring class.

297. Due to the labourers not being able to get work.

298. No.

299. I do not think so.

77 A. Certain people do object to go away from their villages to work elsewhere; they seem afraid to leave their women and children in distress. But the greater number are disinclined to work and are unwilling to go from home so long as there is any chance of their being supported by some one else.

113 A. Yes. But Public Works Department rates are too high, I would not pay the people more than local rates. Ordinary local rates are very much under Public Works Department rates, and if the people were paid according to local rates for their labour a large number could be employed for the same amount of money.

113 B. Yes. But I do not think it is necessary to employ their full time or give them full wages. As soon as they can get work in the villages and bazars I would reduce the work.

282. I have always believed that the rise in prices was more than reasonable. I believe in a great measure it was due to the merchants holding up the grain in the hopes that Government would buy to give to the poor or that dealers from more affected parts of the country would buy at increased prices.

282 A. It would be difficult to identify individuals but all the merchants and dealers combined in this action.

The local retail traders in villages generally charged more than the traders in bazars and towns.

284. The price of rice rose from R2-8 or R2-12 to R6-4 per maund. With the exception of August and September 1897, this seemed to be sufficient during the rest of the time.

303 A. One or two merchants brought some Rangoon rice to Pakur, and this immediately lowered the price of the local rice.

304. (1) It would make the cost of relief greater to the State.

(2) It would lower the prices of food-grains in the bazars and open markets for the time.

(3) It might make private trade less active for a time.

305. I certainly think there was both at Bolpore in the Birbhoom District and at Pakur in the Santal Pergannahs, both of which places were under my supervision. They succeeded in getting the higher prices, and for as long as the people were able to pay the higher rates.

Such rings can certainly be formed at the present time in India. It is difficult to suggest any one method by which you could break them. No method will succeed so long as the people hold up to export the food-grain.

Written statement of evidence and written answers to the Commission's questions by the REV. MR. E. T. BUTLER, Nadia Zillah, and Member of the district Board, Nadia. Dated the 9th March 1898.

I herewith return the papers on the famine which you sent me. I have made a few notes at the sides of different memoranda, etc. However, as I occupied no official position in connection with the distribution of rice in the late famine, whatever I have been able to state has been from personal experience. If recommendations are taken note of, I should suggest that in future famines, wherever available, European planters, missionaries, etc. or thoroughly reliable superior native officers and Members of District Boards with Chairmen of Local Boards, should be asked to act as Inspectors of the distribution of rice at the various centres. This I feel sure would obviate what appeared to me to be the only weak point in the distribution of rice made during the late famine.

*2. Local failure of rains.

3. (a) Two years' want of rain and the fact that the crops when produced were only one-fourth of those of other years.

(b) People say that thirty years ago rice was R8 per maund for the period of eight months.

4. 1895-96 lack of rain.

6. Absence of facilities for irrigation.

7. If farmers have two years' good crops they can lay up sufficient for four years.

8. Labourers live from hand to mouth and consequently even in good seasons have no special advantage for storing.

9. I should say the need was rightly estimated.

* The numbers refer to the questions drawn up by the Commission.

*Rev.
Mr. J. P.
Meek.*

*Rev.
Mr. E. T.
Butler*

*Revd.
Mr. E. T.
Butler.*

10. I should think that in our district nearly 50 per cent. of the population stand in need of some help in times of famine, *i.e.*, either work or relief.

12. Some persons were relieved who did not need help. This was done through the relieving officers helping their caste fellows and friends often to the exclusion of others.

15. Judged by this, markedly successful.

16. Yes; when cooked rice was given although this was cooked by a Brahmin and a Mussalman cook to suit the castes, yet there was a tremendous falling off in numbers.

18. Principle certainly good. Might have been used even more extensively.

23. Certain amount of injustice from the unwillingness of officers to listen to leading men in the village.

29. A certain amount of breaking up, but so far as I can ascertain no ill-effects.

32. Many middle class people and labourers had to sell their cattle and household property in order to sustain themselves and families and then to borrow money.

33. With continued prosperity they ought to recover their former position.

35. No such means exist so far as I know.

71. (a) Six miles.

259. Should gather there is an increase; land very scarce.

283A. Prices rose from R2-12 per maund to R6 per maund.

284. Rose gradually to above.

303. None, so far as I know.

303A. None, so far as I know.

305. I am inclined to think there were Mahajans and shop-keepers fixing the rates and importing.

Written statement of evidence by MR. J. A. BOURPILLON, C.S.I., Commissioner, Patna Division, dated 15th March 1898.

*Mr. J. A.
Bourdillon.*

The four main points to which the attention of witnesses in Bengal has been invited by the Secretary to the Famine Commission, and on which written evidence is desired, are thus stated in paragraph 4 of Mr. McIntosh's letter No. 42, of the 18th January 1898, addressed to the Government of Bengal.—

- (a) Departures from the prescriptions of the Bengal Famine Code, which have occurred in the Province during the recent famine.
- (b) Degree of success which has attended the measures adopted, considered primarily with regard to the relief of distress and the saving of human life, and secondarily with regard to economy.
- (c) Advice as to the measures and methods of working which seem likely to prove most effective in future in those two respects.
- (d) Other recommendations or opinions thought likely to be useful in case of future famines.

I propose to take these in order.

PART (a).—DEPARTURES FROM THE CODE.

2. These are stated in full detail in the memoranda recorded by Messrs. Chapman, Macpherson and others, but many of the divergences are of a petty character: the more important are the following:—

3. (a) *The simplification of classification of labourers.*—It was found, after a short experience of task-work, that the Code sub-division of workers into four classes, A, B, C and D, was unnecessary, because labourers of classes A and C were extremely few, and because, while, in the first place, the existence of these details afforded opportunities for speculation and fudging, the maintenance of them for statistical purposes caused much extra clerical work with no corresponding advantage. A simple classification into B (able-bodied diggers) and D (carriers and weakly diggers) was adopted from about the middle of May, and was found to answer all the requirements of the case.

4. (b) *The abolition of individual tasks in favour of tasks by gangs.*—As has been pointed out in paragraph 155 of my final report, the Bengal Code (section 67) clearly contemplated the exaction of individual tasks, the daily calculation of individual earnings, and the payment of the aggregate in a lump sum to the gang. It was soon found that such a system was quite unworkable, and the evolution of the gang system in Behar is described in paragraphs 155 to 160 of the report referred to above.

5. (c) *The introduction of the Blackwood system.*—This system was introduced in Darbhanga in March and in other districts during May: it was nothing more or less than piece-work with a maximum, and was evolved to meet the insuperable difficulty of promptly measuring and paying for an immense number of individual or small gang tasks of widely varying dimensions. It is briefly described in paragraph 154 of my final report, and at greater length in paragraph 107 of the Darbhanga District Report, and in Mr. Blackwood's evidence before the Famine Commission. Some officers prefer this system to piece-work, but it depends for perfection of working on the constitution of each gang remaining unchanged, which is an impossible condition: if the gang does not remain absolutely constant from day to day,

the total payments after each task has been completed represent not the authorized daily wage of the labourers of the different classes and sexes, who were actually present each day, but the total payable for a given number of days to the gang as originally constituted when the task was set. I prefer the piece-work system.

6. (d) *The introduction of piece-work.*—This system, though specially forbidden by paragraph 52 of the Code, was introduced with the approval of Government at the beginning of May, and, where it had a full and fair trial, it proved most successful and secured the hearty approbation of those who had to administer it. An account of the system is given in paragraphs 217 to 234 of my

* No. 2447 F.G., of the 11th final report, and both there and in February 1898.

my report on Mr. Higham's suggestions,* I have recorded my entire support to the scheme and my reasons for thinking that it should form the backbone of relief work administration in the case of future famines.

7. (e) *The non-enforcement of a distance-test and the execution of many small works in preference to a few large ones.*—The principles of the Bengal Famine Code on this subject are laid down in section 53, wherein it is stated that while small works should be utilised to the utmost in the early days of a scarcity, large works will be the backbone of the system of relief in the later stage of a famine. Section 78 further says that residence in camp is compulsory for all relief workers whose homes are not within a reasonable distance from the works on which they are employed. Other sections provide for the drafting of labourers from small to large works. None of these instructions could be fulfilled; the provision of a few large works instead of many small ones is impracticable in Behar, because of the density of the population, their almost exclusive employment in agriculture, and the impossibility of devising works which shall be really useful, and which shall accommodate the large numbers which at the lowest computation would require employment. The subject is fully treated in paragraph 179 of my final report, and in paragraphs 19 to 24 of my report on Mr. Higham's proposals.

8. (f) *Alterations and variations in the classification of children.*—Section 62 of the Bengal Famine Code classes as children all young persons of both sexes who are not more than 14 years of age, and declares that those between 8 and 14 years should be treated and paid as big children, all below 8 years being reckoned as small children. In Behar there was some variety of practice in this respect. On Civil Agency works except in Darbhanga, the Code classification of children was maintained: in works under the Department of Public Works the classification adopted was that embodied in a Ready Reckoner issued with Government Resolution 420 M.P.I., of the 25th January 1897, according to which children are divided into two grades—10 to 12 years, and 12 to 16 years, children below 10 being regarded as dependants. Considering the difficulty of judging children's ages, and the ignorance of relatives on the subject, the variation is not material. Furthermore, the payments to, or allowances for, children under eight years of age on works were not graduated according to their age or working capacity, as contemplated by sections 84 and 104 (i) of the Code. All children above eight years received half the adult ration, and all under it one quarter thereof, except children in arms, for whom one piece was given to the mother. It would have been impossible to

estimate separately the age, powers, and requirement of each child on the works.

9. (g) *Uses of the poor-house.*—After a short experiment it was found quite impossible to employ the poor-house as a penitentiary for contagious workers or as a test of the necessities of applicants for relief. In the first place no powers are given in the Code, or elsewhere, to enable famine officers to imprison persons who are unwilling to work, and secondly, the prejudice against the poor-house was so deep and so widespread that willingness to enter it was in fact a test not of distress but of self-respect, and had this provision been rigorously enforced, numbers of persons would have gone without gratuitous relief till they were at the point of starvation, and had thus reduced themselves to the necessary standard of emaciation.

10. (h) *Kitchens* were not opened to the extent contemplated in Chapter IX of the Code. The alternative system was adopted of giving allowances for dependants, and the extent to which gratuitous relief was granted, in and near the homes of the recipients, enabled us to avoid the expensive and easily-abused system of numerous kitchens. These institutions were largely used, in some districts more freely than in others, for the relief of children, who it is feared were being defrauded of their share of the dole when relief was given in money or in dry grain: they were further most successfully employed in the last weeks of the scarcity as a test of distress among adults.

11. (i) *Gratuitous relief in villages* was given on a larger scale than appears to be contemplated by the Bengal Code. The utterances of the Famine Commission on this subject are somewhat timid and tentative; but it was found in Behar that a complete system of village relief could be organized successfully, which, while it afforded relief to all who required it, and to no others, also kept the relief works free of large numbers of persons who would otherwise have crowded to them, to the detriment of discipline and efficiency, and to the greater cost of the work. Another point to be noticed in this connection is that after a fair trial the endeavour to obtain work of some sort in return for gratuitous relief was generally abandoned, for it was found that the trouble and cost of this operation were out of all proportion to the advantage to be gained.

12. (j) *Accounts.*—Lastly, it was found that the existing rules in the Code as to accounts were both incomplete and unsuitable. They were eventually superseded by a fresh set of rules which worked well and were not difficult to understand.

13. This completes the tale of important divergences from the provisions of the Code; others in matters of detail it seems unnecessary to mention.

PART (b).—DEGREE OF SUCCESS WHICH HAS ATTENDED THE RELIEF OPERATIONS.

14. If I may say so without presumption, I consider that the operations in Behar for the relief of distress were entirely successful; they effectually prevented mortality, and they were carried through not only at a much lower cost than on the occasion of the previous famine, but at a rate which is intrinsically low, and which will, it is believed, compare favourably with those prevailing in other provinces.

15. Hardly any deaths from actual starvation were reported, and every one of these on investigation proved to be due to some other cause; doubtless the lives of many of the poorest classes of beggars and of those who had no relatives to support them, were shortened by disease more or less due to insufficient or unsuitable food; but of absolute starvation I believe that no one died. The general health of the people throughout the period of scarcity was abnormally good, owing chiefly to the absence of cholera; but when the rains of 1897 fell copiously, the ensuing malaria and fever was particularly fatal among a people reduced by a long course of short rations and unwholesome food.

16. As regards the cost of the operations, I beg to refer to Chapter IX of my final report. The total number of persons relieved in the Patna Division, reduced to terms of one day, amounts to 109,884,455 at a total expenditure of Rs. 42,870, which gives a cost per head per diem of 1 anna 3 pies throughout the operations, while the direct payments only, i.e., those for wages and doles, give an average of only 11 pies per head per diem. The outturn of work per male unit averaged 36.3 cubic feet throughout the entire operations, and the cost rate was Rs. 2-9-4 per 1,000 cubic feet. Hardly one of the works that have been executed can fail to be of permanent utility, while several must prove to be of great administrative importance.

17. I am satisfied that in the circumstances of the case, remembering in particular that task-work employed 57 per cent. of the labourers, these results could have been achieved in no other way than that adopted in Behar, i.e., a strict task supplemented with very careful, though extensive, gratuitous relief: I feel no hesitation in saying that in this way work was rendered more efficient and better discipline and morale maintained, and that large numbers were thus kept off the works who would otherwise have gone there, while the careful and elaborate organisation of village relief with a daily dole averaging so little as 8 pies per head prevented mortality, while it reached those for whom it was a necessity, and none others, as testified by all who saw the operations in progress. I fully believe that the demoralisation which is supposed to be a necessary incident of famine relief, especially when it is given gratuitously, was reduced to a minimum in Behar and I consider that one of the most important results which has been achieved by these operations is the final dissipation of the traditions of lavish expenditure which are a legacy of the famine of 1874.

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PART (c).—ADVICE FOR THE FUTURE.

18. Briefly, my opinion is that except in some points of detail, I should in a future famine follow the general lines of administration which were adopted in 1897. I would, however, commence with piece-work at rates adjusted to the current prices of grain, supplemented for the feeble as necessity arises, either by piece-work at more favourable rates, or by task-work. I would, as far as possible, have all works under Public Works Department management, subordinating all Public Works officers in the district to the Collector for the time being; and if they could be provided, I would have in each thana a few moderately large works rather than many small ones, but this should be only a working rule, subject to modification to meet the needs of particular localities or special circumstances. I would on no account impose a distance test, and this would in this view not be necessary, for the employment of a system of piece-work would allow the able-bodied members of a family to go further afield for work and stop longer away. The system of accounts on both Civil Agency works and those under the Public Works Department should be the same.

19. As to gratuitous relief, I think that our arrangements for village relief could hardly be improved upon, but the formation of village lists should be undertaken at an earlier date than was the case in some parts of the Division. Poor-houses cannot be made a test of distress; it will be enough if they are used, as they were in 1897, as infirmaries and shelters for travellers and wanderers. Kitchens also are unsuitable in Behar as a test of distress at first, though it is conceivable that they would be effective in other districts where, for instance, the population are entirely Muhammadan, or where they are largely composed of low-caste people and aboriginal tribes; they afford the best means of providing relief for children as distress deepens, and an easy and efficacious method of thinning the lists of adults in receipt of gratuitous relief when prospects are improving, and distress is nearly at an end.

PART (d).—OTHER RECOMMENDATIONS.

20. Many recommendations, of a general character, have been made from time to time in favour of measures which may prove likely to prevent or mitigate future famines. Many of these are unpractical, many purely doctrinaire; but the few stated below, though not new, seem to me to be worthy of consideration.

21. First and foremost, I place the development of irrigation: when general famine appears in Behar, it is always a rice famine and is due to nothing but failure or bad distribution of the seasonal rains; hence, briefly stated, anything that will effectually compensate for this failure will prevent famine. The development of well-irrigation will not meet this difficulty, though it will greatly benefit the winter crops. Large and well considered irrigation schemes supply the true remedy, and every effort should be made to carry these out wherever they can be executed with a reasonable prospect of success. Much has already been done during 1897 with famine labour on several schemes of this kind, but the projects should be completed and others initiated if possible. If famine and the heavy expense of operations for its relief can be averted in this manner, the expenses of construction and maintenance will be amply repaid.

22. In the next place, the severity of the distress could be much mitigated were it possible to reduce the pressure on the soil, but emigration has been urged upon the people for

Mr. J. A. Bourdillon. years with little success: in only a few districts of Behar is there any readiness to emigrate, and that only for a short time in most cases. I recognise that emigration on a large scale is a counsel of perfection, but the matter is too important to be altogether omitted from this note.

23. To enable Government and the local officials to deal still more effectively with famine, more perfect information is required on more than one subject. It has been suggested by Mr. Higham (and the suggestion will doubtless be put into effect) that complete schemes for relief works in each district and thana should be prepared and kept in readiness. Compliance with this proposal will enable District Officers, on the approach of distress, to start works at once without hesitation or delay. But besides this more complete information is required as regards agricultural and trade statistics.

24. Obviously, one of the most important matters to be ascertained when scarcity is imminent is the food stock of the country: though this question may, as Sir Richard Temple observed, be insoluble, yet we can at any rate make efforts to approach solution. The survey and settlement

operations in North Behar will vastly improve our knowledge of agricultural statistics and the economic condition of the area over which these operations extend: we shall obtain reliable information as to the area under each crop, the average outturn per acre, and the yield year by year: and these statistics, taken in connection with those for trade and consumption, will greatly assist, though they will not enable, local officers to estimate the gravity of the situation.

25. As to trade statistics, much remains to be done. The rail-borne traffic into the Division and between its districts is registered with more or less accuracy, though even here there is room for improvement. On the other hand, a great mass of traffic escapes registration altogether: the large trade with Nepal is registered only at a few points: the boat and steamer traffic on the Ganges is not recorded in ordinary years, and no note is taken of the traffic by road between districts. All these omissions should be rectified, as far as possible, for I feel assured that the comparatively small expenditure on establishment, which a complete scheme of registration would involve, would be more than repaid by the value of the information obtained, not only when the next famine occurs, but in the every-day administration of the Province.

Written statement of evidence by the REV. FR. E. VAN HECKE, S. J., Roman Catholic Missionary, Karra. Dated the 22nd March 1898.

Rev. Fr. E. Van Hecke. In reference to the series of questions drawn up by the Famine Commission, No. 345, dated Calcutta, the 24th February 1898, I beg to offer the following remarks and suggestions.—

(1) It seems to me that in the district of Karra, famine was due to failure of the rains, and to the very high prices of food-grains.

There was grain enough in the district, but the mahajans bought up all and later on fixed very high prices, so that the poor people could in no wise buy it.

(2) Regarding the relief measures, I would remark that they began too late when people were already in an exhausted state and too weak to work. Relief works should have been begun in January 1897, when people were strong enough to work, and thus by saving up their earnings, they could have later on bought some food-grains in the markets, when prices were comparatively low.

Relief works should have been created in several centres, not far from each other—say at a distance of two leagues from each other—because people, in the exhausted and weak state in which they were, would not and could not go far in search of work.

People on relief works should be paid their wages every day or every second day, for, being hungry and having nothing wherewith to buy food, they cannot continue many days without receiving wages. I am of opinion that had the relief works been started at an earlier date, many of the people would have been saved, who died from sheer hunger or from sickness contracted on account of the weakened state of their bodies.

(3) A railway or tramway from Purnia to Ranohi is most desirable. In time of famine grain could be easily and rapidly imported from other places. At present the Lohardaga district is cut off from all centres.

Written answers to the Commission's questions by the REV. S. W. DONNE, Missionary, C. M. S., Nuddea. Dated the 30th March 1898.

Rev. Mr. S. W. Donne. In answer to your communication of 23rd February last, asking for any note I might have to make upon the experiences of the recent famine, I beg to say that I have carefully read through the questions you sent and have the honour to enclose a few remarks. I do not feel competent to give you information upon the wider questions touched upon in your list of questions, for my operations were confined to selling grain at cost price for ready money to the poor of my immediate neighbourhood. By this means they were enabled to live through the famine without getting into debt, and though of course suffering from the scarcity were able to exist upon their earnings on relief work, or other work by which they earned a few pice per day.

*12, 13 and 150. Locally there were a good number of people who received relief who were in no need, and *vice versa*, some to whom relief was refused who really needed it. This was due to favouritism of local babus placed in charge of the distribution.

22, 91 and 169. A great many complaints were made to me by parents of children whose names had been duly enrolled on the register that the pice due were not forthcoming on application. Similar complaints were made by members of gangs at work on relief works, also by those whose trees and bamboos, etc., were cut down, to whom compensation was due. Chowkidars too would not recom-

mend cases for free relief unless a portion of the dole was handed over.

One Brahmin said "Sahib, we consider it our duty to put a good part of what comes into our hands into our own pockets and to distribute the remainder."

54 and 60. The road constructed was not completed. Therefore for a great part of its length it is unusable. Neither has it since been repaired. Our last state is worse than the first.

192. I think there is room for more village tanks; the water supply is not very good; I constructed a tank.

151. Our request to be allowed to recommend needy cases for relief was refused.

285 and 303. Our dispensary had fewer patients than in former years. Cholera was conspicuous by its absence.

In this neighbourhood it was the failure of available stocks which caused us to take active steps to import grain from Calcutta. I did not hear of any action being taken to encourage the importation of grain for this neighbourhood.

Generally speaking I consider more use should have been made of the available European gentlemen's services. The needy would have received the money and doles allowed. As it was a good part went to unworthy pockets.

Answers to the Commission's questions by Surgeon Major T. R. MACDONALD, Civil Surgeon, Murshidabad (lately of Saran).

Surgeon-Major T. R. MacDonal. *1. I believe 2,327 square miles and a population of 2,253,038 were more or less affected, being the whole of Saran except Sonapore Thannah.

2 to 4. Distress due to both causes. Only 23 inches of rain fell against an average of nearly 50 inches in a good year;

late rains failed entirely, and rice was a complete failure and *rabi* about one-half normal. Very much higher prices than in other years. I do not know about other famines. Affected area not in a very favourable state previous to failure of rains owing to dense population and previous season's partial failure of crops.

5. Owing to density of population in most parts of the district, about 950 per square mile, living precarious amongst smaller ryots and labouring classes.

6. Except the *rabi* crops which are largely irrigated I believe other crops entirely dependant on rain.

7. I am unable to give figures, but I believe that the poorer ryots and labouring classes are generally improvident and have no reserves of money or food.

8. I have had no previous famine experience in this or any other district.

9. I believe that on the whole the distress was, if anything over-estimated throughout, and I consider that the amount of relief afforded was, if anything, overdone. I say this from my many conversations with the Indigo Planters of the district who, I believe, have an intimate knowledge of their own localities.

10. I am unable to state my opinion.

11. I cannot say.

12. I believe both loss of life and severe suffering would have resulted had such active steps and such a large proportion of people not been relieved. I believe large numbers of people relieved did not actually require such relief, and I attribute this to the mendacity of the people and the Government lower officials and employes being both ignorant and careless.

13. I think all that possibly could have been done was done under the circumstances.

14. I know of no such cases.

15. I believe the relief has been successful in its object, and though the mortality has been slightly over the normal, I do not think more timely measures would have averted it.

16. I believe certain changes in the scheme of relief were made on works from time to time, but, so far as I could ascertain, these changes were on the whole judicious and had only the effect of relieving the needy and excluding fairly well-off people.

17. No such connection came under my notice.

18. I believe so.

19. I believe, so as far as the system could be carried, but certain Brahmins and Rajpoots and other castes would prefer to starve than work.

20. Yes, as far as it was possible.

21. I believe that there was a "comparatively large" number of destitute persons who could not be subjected to the labour test in Saran in comparison to total population and to the numbers relieved on works owing chiefly to caste and other prejudices.

22. I believe the test was fairly stringent, and the tasks were not full ones generally speaking, or such as they would perform in their own fields. I believe where several members of a family worked, the wage was more than a subsistence allowance, for they became fat and sleek on it.

23. Relief works were more numerous than that considered sufficient by the Famine Commission, and I am not aware of many persons being on works in Saran famine. It is intensely disliked by the people and is not a fair test of necessity.

24. I regret I have no statistics to offer.

25. I have had no previous experience.

26. I cannot say.

27. Given in all the forms mentioned.

28. I believe on the whole the relief so afforded was confined to persons in want, though no doubt numerous impositions took place.

29. I believe lives have thus been saved and that also a certain amount of demoralization has been the result.

30. I regret I have no figures by me, but I have heard persons assert who ought to know, that relief might have been more economically administered than in the present famine in Saran District.

31. I cannot say.

32. I cannot specifically answer the first part of the question. I believe no permanent injury will result to them and a few good seasons will put them right.

33. I am not aware of such.

34. So far as I am aware they are sufficient.

35. Do not exactly know how obtained in Behar.

36 & 37. I have no personal knowledge.

38. I understand they were.

39. Tank and road making and repairing, gratuitous relief in doles and money. Poor-houses, cooked food, kitchens and hospitals were maintained by Government. Private individuals gave labour, doles and money. *Surgeon-Major T. R. MacDonald.*

40. I have frequently visited relief works throughout the Saran famine.

41. All were Code measures.

42. I believe all the Code measures were tried in the famine.

43. So far as I am aware no very material departures were made from the Code.

44. I believe the construction of roads were most useful in both respects.

45 to 47. I believe if more roads and repairs of roads had been done and less constructing of tanks, more good would have resulted. I would recommend filling up of old tanks especially in towns as being more economical and conducive to health than making new ones.

48. Natives of all classes approve of constructing tanks.

49. As above stated, I entirely disapprove of constructing tanks near towns and villages as they only foster disease. They are only useful where water is scarce for watering cattle. Almost never used to any advantage or extent for irrigation in Saran.

52. No experience on this point.

53. I think they are much more likely to be useful than tanks.

54. I believe that all the work expended on tanks could have been usefully employed on repairing existing roads, and probably this will hold good next famine.

56. No metal was collected in Saran District as the *kunkur* beds were generally not in affected localities.

57 (1). Useful if no better employment obtainable.

57 (2). Useless as a rule for the permanent benefit of villages and only form breeding places for germs of cholera and other diseases.

59. I should say about 400 persons. I cannot give any opinion on the second part of the question.

60. I believe tanks were not constructed near villages in Saran nor on any fixed principle so far as could be seen.

61. Not in Saran.

62. I think tanks no protection against famine.

63. Not in Chupra.

67. I believe the Saran canals could be improved and extended but I cannot speak as to the financial success possible or probable, but I believe their improvement and extension would have benefitted the district much more than constructing tanks in all sorts of places and apparently at haphazard.

70. Plans and estimates for construction and repairs of certain roads were ready, but were not adhered to, why I cannot say.

71 (a). About six miles.

71 (b). No people would stop on the works so far as I know.

72. I think so.

73. The women and children would rather die, I think, than go by rail or steamer to work at long distances, and they formed the majority of workers in Chupra, their husbands in many instances having left before the famine for Assam.

74 & 75. I do not know of any work in Saran where workers resided.

76. I think great mortality and distress would have resulted in Saran if residence were obligatory.

77. I believe so, and I believe the feeling was so strong against residence in Saran that it was not tried.

78. I believe disposable establishment would be quite inadequate for such a purpose.

79. I did not ever hear of such reductions being made in Saran.

80 & 81. I believe it was not tried.

82. I believe blankets were only provided in poor-houses and hospitals.

83. I cannot say.

84 to 97. I have had no experience of piece-work and have not seen Mr. Higham's note.

98. No children under 7 years of age should be employed.

*Surgeon-
Major T. B.
MacDonald.*

99. If they were in good robust health, I would fine them ; if weakly, a warning only.
100. I think expedient and necessary.
101. No experience.
- 102 & 103. I am.
- 104 to 107. Not seen report.
108. No experience.
- 114 to 123. I have had no experience of judging or occasion to think of such matters as treated of in Section IV.
127. I do not think such a practice existed in Saran.
128. No experience.
130. I am in favour of kitchens in cases where relief is given to non-working children.
- 133 to 147. I was not circumstanced in such a way as to get any information whatever on these points.
148. The Collector of Saran in paragraph 78 of his report states it never reached 20 per cent.
149. Yes.
150. So far as I saw they were.
151. By the charity of friends and villagers and only when food fails and falls very low are they thrown on the State.
152. Yes, chiefly women and children and a large proportion were *parda nashins*.
153. A fairly reliable estimate may be formed and probably the numbers will vary according to distress.
154. To a certain extent it may.
155. I do.
156. No.
157. I think so.
158. I believe that in Saran the inspection organization was fairly good.
159. I think so.
160. I believe that some of the people were most unwilling to accept such relief for this reason.
161. I believe so, and it is only natural it should.
162. I think so.
163. Yes, I think so, but I do not think it would have been any benefit to either the village or the people to construct tanks, but roads would have been useful.
164. I believe central kitchens better suited at the beginning and end of distress than gratuitous relief.
165. I believe if the food were cooked by high class Brahmins at kitchens there would be little feeling against them, though really deserving people might sometimes be thus excluded.
166. I think so.
167. In both forms I prefer grain.
168. Except *parda nashins* ; they had generally to repair to a central place.
169. I do not think there was much extortion.
170. Police and revenue agency, I believe, was used to the utmost, but had to be supplemented.
171. With the single exception of the Huthwa Raj and a few others, very little voluntary relief was given in Saran.
172. No. I do not think so at any time, considering the prevailing distress.
173. Chiefly beggars and wanderers.
174. People of the better class would not enter them and no pressure would induce them to do so.
175. I have had no previous famine experience.
176. High throughout the period and because often people only in a moribund state entered them.
177. A very large number of the inmates came from the North-Western Provinces, especially in poor-houses in the north of Saran District.
178. I believe from the state of emaciation and misery of the majority of inmates that the famine was severe and broke up many households and caused wandering.
179. I believe this was in most poor-houses in Saran systematically done.
180. Diet insufficient and had to be supplemented.
181. I think that the rules are on the whole suitable and worked well in practice.
182. I believe such to be necessary and that compulsion was sometimes necessarily used to save life.
183. Endeavours to get work out of them used but with little success.
184. Compulsion, especially in the first months, used for detention, inmates not free to leave when they chose. Departures and escapes fairly numerous.
185. I believe that such relief centres were opened especially at indigo factories and under supervision of Europeans.
186. Yes. In the case of women cotton spinning, sewing, etc., and men on earth-work.
187. I did not hear of any large unmanageable centres or any epidemic disease at them.
188. I think so.
189. I do not think so.
190. I think in Saran where, generally speaking, European supervision can be obtained in most places, it is preferable to village inspection.
191. They differed so much, I cannot say.
192. As above mentioned, Indigo Planters gave their services voluntarily and were of great assistance, and the size of the area depended a great deal, I believe, on the size of the tract affected where a planter happened to be living.
193. For relief of the incapable poor generally.
194. For all these classes.
195. I would be inclined to substitute them entirely at these periods for gratuitous relief.
196. I believe to all applicants.
197. A special officer had to be appointed to supervise kitchens in all details.
198. Preferable to give cooked food as parents were not to be trusted. In Saran it was principally children who resorted to them, and they did incalculable good and saved many lives.
199. I believe extensive State advances were made for these purposes, but I can't give figures.
200. I believe those who got money for "well sinking" used it for that purpose.
201. I believe the money advanced for seed after the flood in Saran in July had been of immense value.
202. I cannot say.
203. I cannot say : I am not aware.
204. I do not approve of the principle of subsistence advances. I believe in relief work test.
205. It might in some instances be more profitable, but generally not so.
206. I believe every cultivator would want to borrow rather than go to relief works, especially as the State would be found a much more lenient lender than the "*mahajan*" and increase of indebtedness would assuredly follow.
- 207 to 215. I cannot give any information on these points.
- 216 to 219. I do not think any use was made of forests in Saran as no area of any extent is a forest.
220. They should be returned to their respective villages and nearest relations.
221. No, I think not.
- 222 to 226. I have not seen the *Gazette*.
227. I do.
228. Not to any extent. Such shops were started in Saran and interfered little with trade.
229. I heard so.
230. I think it should be given just before the commencement of the agricultural season.
231. I cannot say.
232. No.
233. Yes.
234. I think it did immense good.
235. Opening of cheap district grain shops, distribution of clothes and grain.
236. 8,848 relieved at shops, 32,040 people relieved by grain.
237. I think the grain distribution evoked most gratitude.
238. Distribution of seed grain.
- 239 & 240. I think so.
241. I do not know.

242. Accommodated in poor-houses chiefly and attracted attention. Due to distress in other districts where relief not given.

243. I do not think that the wanderers would have been any less, though any amount of relief works had been opened.

244. I believe a large number of wanderers died.

245. Many of the wanderers came from the North-Western Provinces.

246. No difference.

247. I think they should be fed just as those belonging to one's own district, but the province or district from which they came should be informed if a large number of persons continue to come from any particular locality, which ought to be watched by them and provided with relief.

248. 29.51 from 1891-95; 34.85 in 1896; 31.96 in 1897.

249. I think the higher ratio to a very great extent due to indirect effects of scarcity.

250. I believe the mortality would have been very much greater if it had not been met by relief measures.

251. { Yes.

{ Yes, combined with malaria.

252. There was not much cholera in Saran during these two years, and no scarcity of water felt.

253. Mortality from diarrhoea and dysentery not remarkably high, but possibly diagnosis of the *chowkidars* at fault.

254. I considered the poor-house and kitchen diet insufficient to maintain health, and I recommended the addition of more vegetables, oil and salt to the Collector of my district. An additional chittack of rice or atta is also necessary.

255. I only heard of one death due to starvation. I heard of many due indirectly to starvation, but cannot give figures. I believe mortality was greater among women than men and among the aged than adults, and I heard of a good many cases of abandoned children.

256. { None.

{ I cannot.

257. I believe the measures adopted were very fairly effective in principle and working. I do not think that any deaths were due to insanitary conditions in the State institutions named, and I believe every precaution was taken to insist on good water-supply.

258. I believe they were sufficient; and ample medicines and medical comforts were supplied for the sick. More than half of them were returned unused at the end of the famine.

259. I believe so. I have no figures available.

260. Birth-rate increasing, but probably due to better registration in the district. Same holds good for death-rate.

261. I cannot say.

262. I do not know.

263. That they all conduce to the over-population of the country and in consequence to dearness and scarcity of food.

264. Almost every acre in Saran is under cultivation, but still it does not support its population.

265. That famine is always staring the people in the face on the slightest failure of crops.

266. No.

267. I think so. Certainly.

268. I think that a limit would be reached and the ground would become exhausted by continuous cropping.

269. Emigration, *u. . .* *ble.*

270. Extend railways to Burma.

272. { Yes.

{ I think not.

273. The rice tracts are the tracts in Saran which are liable to famine.

274. Two meals a day, rice or atta with *dal*, vegetables, oil and salt.

275. Indian corn and millets, *murwa* and an intoxicating form of rice called *kodo*.

277. They usually say they are indigestible or heating. Rice, Indian corn, barley.

279. A small early morning meal and one principal meal of Ashin rice and salt for morning meal, and vegetables, rice or *makai*, *atta* or barley with salt and oil for evening meal.

280. All complained of the Famine Code meal being insufficient, and more vegetables, rice, salt and oil were added.

281. The diet given at famine poor-houses and kitchens compared very unfavourably with jail diet, which I regard as excellent.

282. On the whole I consider the prices natural and reasonable, though at first there was famine.

283. { I believe "Exchange" has this effect.

{ Yes.

283A. No experience.

284. Very active.

285. Yes. I believe always obtainable at market rates.

286. I believe so.

287. I believe little or no exportation of grain took place.

288. I have no information.

289. I believe all more or less depleted at the close of the famine.

290. I believe but few held any surplus stocks.

291. I believe few such transactions take place.

292. I believe so.

293. Greatly diminished owing to easy railway communication.

294. Yes.

295. I cannot say.

296. Cultivators.

297. { Want of money.

{ Almost no non-agricultural labour in Saran.

298. No, because no demand for labour during the famine.

299. I do not think so.

300. No information.

301. Can't say.

302. I believe a great deal of jewelry, etc., was sold, but unable to make comparisons.

303. I do not know.

304. All classes of merchants imported Burma rice, which was never seen before in Saran, I believe.

305. I believe America could supply rice and Indian corn, and I would favour their import, if necessary, to save life.

Surgeon
Major T.
MacDonal

Written answers to the Commission's questions by PASTOR F. ROWAT, Missionary, Jamtara.

- *1. Pubbia Taluq, Jamtara, Santal Pergunnahs.
2. Distress due to local failure of the rains and of the rice crop.
3. (b) Prices of food-grains were much higher than in ordinary years and slightly higher than those experienced in past famines.
4. Preceding seasons favourable, up to the time of failure of the rains.
5. Population enjoy fair measure of prosperity under normal circumstances.
6. Scarcity of bands and facilities for irrigation cause the agriculture of this district to be dependent on timely and sufficient rains.

7. The majority of the population have little reserves in money or food. Pastor F.
Rowat.
8. According to the experience of the oldest inhabitants of this district, the severity of the late distress equals that of any previous famine on record.
12. Neither Government nor private relief given larger than was necessary to prevent severe suffering. The persons relieved were deeply in need of aid.
15. On the whole the relief measures were successful in preventing deaths by starvation.
19. This test was followed on our private relief works during the late famine, and all persons with a reasonable amount of physical strength were required to work as a condition of relief.

Pastor F.
Howat.

20. Women & children were included and subjected to the above labour test with good results.

23. Residence on a relief work cannot in my opinion be called a fair test of necessity, as the majority of the people have a strong dislike for it, and would sooner suffer severe privation than leave their homesteads to reside on distant relief works.

26. In former famines probably superstitious ignorance led the simple people to suffer rather than resort to relief centres. I would attribute any recent eagerness to attend relief works to a better acquaintance on their part of the pure motives of their benefactors.

27. Gratuitous relief given by me took the form of doles of grain and money to emaciated persons only, who repaired periodically to a central place.

30. Gross cost of (private charitable) relief given by me at Mihijam over Rs13,000.

Thirteen thousand rupees.

Strictly economically administered.

31. We gave indirect relief in the form of small loans for seed grain to poor cultivators.

32. We believe that all classes who suffered from the famine in this district will soon recover their former position.

53. Should the newly-constructed roads be allowed to fall into disrepair, the tendency would be to abandon them, but a little money spent annually on repairs, would make the roads a lasting boon to the public.

54. Abundant scope for the construction of new roads in this district. A road from Jamtara to Mihijam, distance nine miles, greatly needed.

55. In favour of metal collection as a means of employment of labour (1) abundance of metal in the district, (2) inhabitants accustomed to this kind of work, (3) as seen from the fact that stone depôts are established in this district.

56. No.

57. Village tank construction is the best form of relief for the district and people.

59. Average number of workers engaged daily on private village tank construction, six hundred, including women and children.

60. Still ample room for the employment of large numbers on village tank construction in this locality.

71.

(a) Returning every night, 8 miles.

(b) Residing on relief works, 20 miles.

74. Residence on the works has been the exception.

76. Not in favour of obligatory residence. A high task and low rate are in my opinion sufficient tests for the starving.

124. Daily payment before sunset.

128. Several hundred Santals were employed by us.

(i) There was not the slightest difficulty in inducing them to attend.

(ii) Their conduct and work were satisfactory.

149. The bulk relieved belonged to the agricultural classes.

150. All persons thus relieved were physically unfit for work.

151. In ordinary years such persons are supported by their crops, and some by the charity of relatives or friends.

154. No.

155. Doubtless a good test.

156. Yes.

158. Reliable men employed to bring deserving cases forward. Emaciation the chief guide. All gratuitous relief under European (missionary) supervision.

159. Yes. Most important.

160. Not to my knowledge.

161. Yes.

162. Some might have been profitably employed on light manual labour.

163. Yes.

165. The mass of the people are ignorant and superstitious, and suppose the State has some sinister design in giving cooked food instead of grain. Many would sooner starve than partake of cooked food prepared thus.

167. Gratuitous relief given by us in the form of both money and grain.

168. All persons repaired periodically to a central place to receive aid, under the necessary supervision.

198. In my experience parents could not be trusted with money to expend on their children, therefore it would seem better to provide cooked food for the children, who can partake of it without any caste stigma.

200. The persons to whom we gave advances of money for land improvements spent it upon the object for which it was given.

201. The people speak of having derived much benefit from the sums advanced by us for seed. More money might have thus been advantageously spent.

219. The people eat the fruit of the undermentioned jungle trees:

Fruit trees—

Mahua (largely eaten by people of this district) *Bassia latifolia*, Roxb.

Mangifera indica, Linn.

Artocarpus integrifolia, Linn.

Ficus glomerata, Roxb.

Tamarindus indica, Linn.

Zizyphus Jujuba, Link.

Anona squamosa, Linn.

Borassus flabelliformis, Linn.

Also many kinds of edible roots.

220. Transferred to Private Orphanages.

221. In favour of Government grants-in-aid to private orphanages.

227. Yes. A good method.

230. Relief should be given before the commencement of the agricultural season, though distress be at its height.

255. A few deaths only directly due to starvation came under our notice. About thirty deaths we traced to privation. Parents frequently under stress of want abandoned their children.

273. Rice and dal pulses, principal food-grains, used by the people.

274. Well-to-do labourers eat thrice daily, the majority eat twice only, and the poorer classes have but one meal only. The meals consist of rice, dal, vegetables, and milk.

275. If rice and dal are unprocureable, maize, Janka, Kode, and Gundli are used as substitutes.

276. The working classes consider maize (Indian corn) the best and most palatable substitute for rice.

296. The majority of persons who applied for relief were poor Santal ryots.

302. Brass utensils were frequently sold for food.

77A. The natives have a strong dislike to go long distances, or to reside on relief works.

113A. In the case of failure of crops, and prevailing high prices, special employment of labour would certainly enable large numbers to retain longer their independence and have the desired effect.

113B. Long after a famine has been ended its baneful effects on the people are visible, therefore large numbers still need relief in some form. Special employment of labour by the Public Works Department would meet this need.

Written answers to the Commission's questions by PASTOR E. CORNELIUS, Missionary, Sonthal Parganas.

Pastor E.
Cornelius.

*1. The whole of the Sonthal Parganas was affected, but the famine was worst in the Taluq Pabbia.

77A. High caste Hindus will, as a rule, suffer any privation rather than go to work on relief works. When severely

pressed, Santals and low caste Hindus will go long distances for work, and reside anywhere near where they are working.

113A. The answer to this question is self-evident that one wonders why the question is made. If work is given

to the needy and they are paid for it on ordinary terms, they will thereby be able to retain their independence and their full working power, unless the price of food has risen so high that they do not get enough for the money earned to retain their bodily strength.

113B. Something must be done to assist the very poor in this taluq this year also, or I fear many will perish for want of food.

113C. Let the expenditure be met from either the budget provision for ordinary public works, or let it be charged to famine relief, or both, as those in a position to judge shall think best.

113D. To this I have no suggestion to make or criticism to offer.

282. I think the rise of prices was unduly high, and think that this was attributable to the fact that Government took no step to check the greediness of those who cared nothing for the famine stricken, but sought only to enrich themselves by charging as high a price as possible for their food-grains.

282A. I cannot say.

283A. Relief was absolutely necessary in this taluq (Pubbia). The difference in prices was about four annas, I think. The difference was natural though the cause for the prices being so high was unnatural.

284. From eleven seers to seven seers. The high prices were to a great degree due, as said before, to the unchecked greediness of sellers and retail-dealers of grain-food. Grain flowed in freely enough.

303. I cannot say, but I don't think there was any need for officers of Government to seek to encourage private trade, seeing the traders had such a fine opportunity to enrich themselves by it.

303A. No action was taken, as far as I know, and that no action of this kind was needed, I have shown before.

304. If this had been done by Government much suffering would, I feel confident, have been obviated, many lives saved, the price of food-grain very much lowered, though the cost of relief to the State might have been higher.

305. I think there is very good reason to believe that those who had grain for sale did all they could to get as high a price for it as possible, and that they succeeded in it there can be no doubt, seeing there was no power bearing on them to check them in their greed. Importation of grain-food by Government would, on the whole, be, I think, distinctly advantageous.

1. As said, the whole Sonthal Parganas was affected, but the taluq of Pubbia was the most distressed, and at least two-thirds of its population suffered severely.

2. The distress was due to failure of the rains and of the harvest.

3(a). The former rains were insufficient, and the latter rains utterly failed.

(b) Food-grain was not only much higher than in ordinary years, but also much higher than experienced in past famines.

4. The preceding seasons were favourable.

5. A large section of Pubbia—a large number of Santals, and low caste Hindus and others,—is ordinarily in a very unsatisfactory condition.

6. The agriculture of the affected area is specially dependent on timely and sufficient rain, the soil being high and sandy; no facilities for irrigation.

7. At least seven-eighths of the population of Pubbia have no reserves of money or food to enable them to withstand the pressure caused by the failure of one harvest.

8. I have been told, and believe it, that within man's memory no such famine has occurred here as the one we have just gone through.

9. There was no under-estimation of any of these: for I feel sure that the Deputy Commissioner of the Santal Parganas and the Sub-Divisional officer in charge here (then), knew all about the extent of crop failure, and the degree of distress, and the helplessness of the people, and all honour is due to them for the way in which they met the distress by relief work and gratuitous help.

10. Do not know how to answer this.

11. Not knowing what the standard of the Famine Commission is, I cannot answer the question.

12. I do not think that the proportion of the total population relieved was larger than necessary. No persons were

relieved by Government officials here who were not really in need of it, I feel sure. It may be that some deceived us and obtained relief, who might have done without it, though I trust not.

13. Though we sought to do our best, and, I am quite certain, the Government officials did, I fear that many suffered greatly who might have been relieved, and that some died who might have been saved. If this is so, it was due to the fear of giving more than necessary.

15. The relief given has without doubt been successful, yet there can be but little doubt that the mortality has been above the normal, and I think that this might have been prevented by more extensive and timely relief measures.

16. Do not know of any such changes.

18. I believe that all (Europeans) in charge of relief measures acted conscientiously to sufferers, both strict and tender.

19. All who were able to work were required to do so as a condition of receiving relief from Government officials, and as a rule with us also, though some high caste Hindus who looked strong enough to be able to work received relief from us, as we knew they were in great need, and would rather suffer any privation than go on relief work. These however were few.

20. Yes, large numbers of them.

21. A large number of those who made their appearance for relief were emaciated, old and infirm; with us their number was much larger than that of those who could be set to work; and I believe that for some time at least) this was also the case with those who received Government relief here.

22. No fear of any but those who are in real need coming on relief work. Every one had to work hard for the little wage received, and I often wondered how they could manage to pull through on it.

23. I do not hold with the Famine Commission that one large relief work in one sub-division is sufficient (unless indeed, it spreads through the whole of the sub-division) I am glad to say that there was more than one relief work in our Sub-Division. The people who would not "dislike" to leave their homes and be forced to reside on relief works, would be very unlike human beings. It no doubt constitutes an effective test of necessity, but is very far from a fair test. In my opinion it is *cruel* as well as *good*.

24. I cannot do so.

26. This is not my experience.

27. "Gratuitous relief" was mainly in doles of grain.

28. None but persons in real need had gratuitous home relief given them: the risk spoken of was fully prevented.

29. Cannot say.

Most certain it is that many lives were saved who received gratuitous relief from Government here. Poor emaciated skin-and-bone creatures received weekly allowances from Government here. Seeing that this was done by our magistrate here, we required the people to come *daily* for their shares. I fear that the famine has demoralised the people, and I am not sure that the charity shown them has not had its share in this direction.

The gross cost of direct famine relief in Pubbia is, I think, about Rs0,000 (Government's and ours).

30. Cannot say.

Not the least doubt of this.

31. Loans have been given both by Government and us; we gave also free gifts of money for seed to a considerable amount.

32. The trading class is all serene. The other classes—the most from among them—have been permanently injured. Some are not likely to recover their former position before some years have passed; others, I fear, will never do so.

34 to 38. I do not know.

39 to 49. Not knowing what the prescriptions of the Provincial Famine Code and that of the Local Famine Code are, I am not able to answer these questions.

50 to 52. Cannot answer these questions with certainty, as I have not made inquiry.

53. Many miles of roads were constructed, and will undoubtedly be of permanent service to the community if the Sub-Divisional officer sees that they do not fall into disrepair.

54. There is plenty of room for new roads, though a great deal has been done in this line. The length of these I cannot say.

- 55 and 56. I have heard or seen nothing of metal here.
57. The value of village tanks is inestimable as a form of relief work in this district, in every way: as a form of relief work, as a means of permanently benefitting the villages and, in many places, the people and the cattle also.
58. I regret to say that little has been done by Government during the famine in this line. The Government relief work has been mostly on road making.
60. Hundreds of tanks can be made in this taluq alone and would greatly help staving off famine in the future.
62. Such works will in a great measure protect against famine.
63. This is answered above, No. 57.
- 64 to 67. None; and none can be constructed here beside tanks and impounding reservoirs.
71. Santals and low caste Hindus will walk any distance if hardly pressed by want of sustenance. They will come and go daily up to a distance of four miles, or even more.
72. Yes, I think so, excepting, though, such as have never done such work in their lives—high caste Hindus.
73. In some cases this may be recommended; in other cases I think not.
74. Not the rule, but the exception, I think.
75. Cannot say.
76. From what I have said it has been seen that I am not in favour of making residence obligatory, and that I consider that a high task and low rate of wage are in themselves sufficient tests.
77. With the many it is very distasteful. To leave their huts and let them go to ruin, and to return without means to repair them, or to make new ones, must be very distasteful.
78. I don't know.
- 79 to 89. Do not know.
90. Man and wife and their children make a gang of themselves as a rule.
91. If those forming themselves into a gang agree that payment should be given to one of them for all, I do not think that there is any fear of complaints being made after payment.
- 92 & 93. Do not know.
- 94 to 97. Cannot say.
98. Let all the children who can work and are willing to do so, do what they can.
99. One's discretion must be used at the time, but as a rule I would cut their pay.
100. Cannot say.
101. Do not know.
102. I would let them earn all they can.
103. Yes, I am. Sundays only and always. I would give the wage to all who have worked three days and more of the week.
118. Such as fear God and love righteousness.
- 128 (i) (ii). The Santals are good workers in general, and will work steadily.
130. It is always best to have kitchens for children when practicable.
148. From 1,500 to 2,200 were relieved daily at the period of maximum pressure in our compound (Mission compound).
149. Yes.
150. Yes.
151. By cultivating their lands, and by day labour. Because they had nothing to live on, and could earn nothing.
154. Yes, I think so.
155. This is good if the able-bodied persons can earn more than they require for their own sustenance, and enough for their relatives.
156. If withholding of help from the incapable person would lead the able-bodied one to go to work, I would not. If not, I would feel obliged to relieve the sufferer.
157. Gratuitous relief at home should be given, I think, to such only as are unable to come daily for their doles, and to such as are absolutely destitute.
158. Yes, it was. We had the people daily before our eyes.
160. If grain or cash doles are given there is no caste stigma connected with their reception.
161. No doubt it does.
165. Caste feelings are against receiving cooked food at kitchens, even though cooked by Brahmins. Many who are really in need would suffer any privation rather than go and take their food there.
167. In grain, and I very much prefer this to gifts of money.
171. At our three Mission stations in Pubbia taluq over Rs 30,000 had been expended on relief, most of which was given gratuitously.
207. With us the land revenue was suspended for the famine year only, and rent for two years has to be given now, which to very many is very hard.
214. I think this would be but humane and right.
221. I think Government ought to continue its aid if desired, but do not think this ought to be desired or asked for.
237. Gratitude must not be looked for here. If looked for it will be hard to find it, I am afraid.
250. The increase in the ratio of mortality was comparatively small here. This I attribute to the success of relief measures.
255. We had about a dozen deaths here who were too far gone when they came to us. I cannot say how many more died.
273. Rice and pulse.
274. Two meals—one at midday, and one late in the evening. In the morning about 9 o'clock they take a little dry or cold food. Many of the very poor have for months to live on one meal only, even in ordinary years.
290. I do not think that there was any surplus private stocks in this taluq.
302. Many sold what they could, but few were able to buy.

Written answers to the Commission's questions by Colonel A. D. McARTHUR, B.E., Chief Engineer, Irrigation, Bengal.

*61. No impounding reservoirs have been constructed in Bengal. The question received considerable attention some 35 years back, in connection with a project for the control of the Damoodah floods, but the proposals were rejected. About 1884, the upper reaches of the Cossys river were explored with a view to the construction of a reservoir to supplement the supply of the Midnapur canal, more especially in the months of September and October, when in a season of drought the discharge of the river, on account of its small catchment basin, is quite inadequate for the irrigation of the area under command of the canal. No suitable site could be obtained, and the matter was dropped.

62. I do not consider such works could be a protection against famine, and in a small degree only as increasing the powers of resistance against famine of the community for which they are constructed. The capacity of the reservoir

governs the area of crop which could be raised, which would be small, and the effect local only. A source of constant supply is required, supplemented, may be, by reservoirs if the supply is liable to run short, as in most cases it is. The reservoirs could in no case be of sufficient capacity to save the whole area under irrigation; probably only a fraction of it.

63. I think there is no such prospect. Close investigation might bring to light some possible sites for reservoirs. These sites would be naturally where the streams debouch from the hills. In such localities the land generally retains moisture and some sort of crop could be raised even in a year of drought. They would be remote from the area where famine presses and where it is necessary to provide labour. Famine labour having to be transported from a distance, a matter of great difficulty, if not of impossibility, works such as reer-

* The numbers refer to the que

awn up by the Commission.

voirs are not, I consider, suitable for the purpose of relieving distress.

64. Six irrigation works were undertaken and partially constructed as relief works during the late famine. They are as below :—

Name.	Approximate estimated cost.	Expenditure.
	₹	₹
1. Tribeni canal	30,49,481	1,87,731a
2. Danauti drainage out.	20,812	1,858b
3. Dhaka canal	3,45,734	15,550a
4. Lakhmana distributary (Madhuban canal)	27,368	5,592b
5. Bagmati canal	about 2,50,000	70,112c
6. Sadowa distributary (Sasan canals)	25,878	9,878b

65. The expenditure that will be required on sub-heads of construction (such as land, masonry, etc.), and exclusive of charges for establishment, tools and plant, would be much as below :—

	Land.	Masonry.
	₹	₹
1. Tribeni canal	1,09,118	9,87,613
2. Danauti channel	Nil.	Nil.
3. Dhaka canal	49,248	93,558
4. Lakhmana distributary	10,861	8,685
5. Bagmati canal	39,120	85,000
6. Sadowa distributary	6,878	9,500

66. The areas that will be irrigable from the works undertaken are as below :—

	Area commanded. Square miles.	Area irrigable. Acres.	
		Kharif. ₹	Rabi. ₹
1. Tribeni canal	427	85,400	17,000
2. Danauti channel	Nil.	Nil.	Nil.
3. Dhaka canal	75	18,000	10,000
4. Lakhmana distributary	...	7,800	(Eloc and rabi.)
5. Bagmati canal	150	31,500	15,000
6. Sadowa distributary	...	3,000	Nil.

Note on the protection of Northern Behar from famine by MR. R. B. BUCKLEY, Superintending Engineer, Sone Circle, dated 5th June 1897.

In this note I propose to consider the districts of Champaran, Muzaffarpur, and Darbhanga only. It is, perhaps, unnecessary to prove that famine in these districts is due to the failure of the winter rice crop; but as irrigation projects have been put forward which could only benefit the *rabi* crop, I give, in Appendix No. I, some figures which show (paragraph 6) the trivial importance, as regards famine, of that crop. In 1873-74 the loss of food-grains, as estimated by Mr. (Sir A. P.) MacDonnell, was 1,209,884 tons in the three districts. Of this only 202,498 tons was lost in the *rabi* crop, or 17 per cent. of the total; had the *rabi* crop failed entirely, the loss would only have been about 30 per cent. of the total. The loss was divided thus :—

	Tons.
Winter rice	779,170
Dhadoi	228,018
Babi	202,498
TOTAL	1,209,684

so that 64 per cent. of the total was due to the failure of the winter rice.

2. It is usual to speak of the outturn of the crops as so many annas in the rupee. In 1873-74 the rice crop in the three districts varied from 2 to 5 annas, and in 1896-97 it was from 3 to 5 annas. The *bhadoi* crops in 1873-74 were from 8 to 12 annas, and in 1896-97 from 5 to 8½ annas. The *rabi* crop in 1873-74 was from 8 to 10 annas, and in 1896-97 from 10 to 12 annas. These facts seem sufficient to show that, if protection is to be given against famine, it can only be attained by efficient irrigation of the winter rice crops. Next in importance is the *bhadoi*.

3. The statistics given in Appendix No. I show that in Muzaffarpur and Darbhanga the rice crop predominates in the northern parts, while the *rabi* crop is a larger proportion of the cropped area in the south. I believe this is true in Champaran also. It is a fact that the northern parts of these districts can be more easily irrigated than the southern parts.

It is unlikely that the area shown above as irrigable will be irrigated except in a season of drought, or one year in every three or four. These works can only be looked upon as works to be undertaken for famine protective purposes, and not as a source of revenue, nor is it likely that they will be remunerative under any circumstances. Having been taken in hand to the extent shown above, it is hoped that to that extent they may be completed, and no doubt would effectually protect the areas commanded from famine.

No such works have been previously constructed.

67. A note has been drawn up by Mr. Buckley, Superintending Engineer, of projects in North Behar which might be undertaken as a protection from famine for the districts of Champaran, Darbhanga and Muzaffarpur. They comprise the works already in hand, though not to the extent that is contemplated in the note. I consider that the project for the Kumlah canal, shown on the east of the map* accompanying the note, might with advantage be investigated with a view to provide labour in future famines, but the prospects of such a work appear to be no better than of those in hand.

69. Programmes of large works, such as roads, embankments, etc., are now prepared in view of prospective famine. As regards canals, with the exception of the projects partially undertaken or already proposed, I do not consider that careful investigation will result in extending the number of such works. Most sources of supply for canals in Bengal are already tapped. Minor projects are at times considered, and quite lately proposals for utilising the water of the small streams issuing from the hills south of the sub-division of Bhabhua in the district of Shahabad, by throwing masonry weirs across the streams, has been under consideration. The proposals have been rejected, as the estimated cost is out of all proportion to the benefits to be derived. No return of any kind could be expected from such works, and if advantageous they would be undertaken by the zamindar interested.

4. I believe that accurate statistics of the entire cost of the famine of 1873-74 are not available. The following figures, which are taken from Mr. (Sir A. P.) MacDonnell's book, show a portion of the expenditure. They do not include the cost of the establishments, etc. :—

DISTRICT.	Distributed in gratuitous relief.	Advanced on recoverable loan.	Paid as wages on relief works.	Total cash expenditure.	Value of grain at Rs. 110 per ton.	TOTAL.
1	2	3	4	5	6	7
	₹	₹	₹	₹	₹	₹
Champaran	38,950	3,00,430	6,43,808	9,81,188	9,33,240	19,14,428
Muzaffarpur	1,41,711	2,21,255	11,00,985	14,63,951	14,34,280	28,97,931
Darbhanga	1,73,250	1,17,250	31,99,829	34,79,329	27,63,200	62,42,529
TOTAL	3,51,911	6,38,935	59,33,322	59,34,168	51,20,720	1,10,44,888

In 1876 also (see page 161, Part III, Famine Commission Report) there was some expenditure on famine relief. Altogether I take it that the cost of famine in the three districts in question for the 25 years previous to 1896-97 may be said to have been at least 120 lakhs of rupees. The tracts in which the crops failed in 1873-74 were again subject to famine in 1896-97, and the estimate of famine expenditure in the three districts is about 80 lakhs of rupees. It does not seem unreasonable, then, to say that about 80 to 100 lakhs of rupees may have to be spent every 25 years on famine in these three districts.

5. The Famine Commission (paragraph 77) said—"It may be inferred * * * that a year which yields more than 50 per cent. of a full crop will produce food enough * * * and that there will be no such pressure as to require special measures of relief." Taking this as a standard, it is possible to estimate what area it is necessary

a These estimates are detailed and include all charges with distributaries, village channels and drainage.

b These estimates are exclusive of charges for establishment and tools and plant.

c This estimate is approximate and does not include charges for distributaries or drainage.

to protect by irrigation to prevent famine in the three districts. The *bhadai* and *rabi* crops in both the famine years have been above 8 annas, so that the desired object would be attained if the winter rice crop would be increased from, say, 3 annas, to 8 annas, that is, if $\frac{5}{8}$ ths of the area under winter rice were fully protected by irrigation. The total area, as given by Sir A. P. MacDonnell, was 2,291,776 acres in 1873-74. Five-sixteenths of this is 716,160 acres. It would probably cost 300 lakhs of rupees to protect this area (supposing that the means of doing so existed), and it would certainly be worth while to spend 300 lakhs once for all, rather than 80 to 100 lakhs once every 25 years in affording relief to the people, even supposing that the irrigation works produced no other result than that of preventing a famine once in that period of years. The figures I have given are those of 1873-74, and the facts of to-day are different, but the figures are sufficiently correct to give emphasis to the contention that the frequent failure, partial and complete, of the winter rice in North Behar, is a calamity which it may be economical to stop, if possible, even if no broader view is taken of the matter than that of the expense of providing the necessary relief.

	Acres.
Champaran	577,528
Mosufferpur	7-9,830
Darbhanga	561,418

6. I do not think that complete protection of the tracts in question is possible, and I doubt whether the standard of the Famine Commission is a sufficient one, but there is no doubt that a great deal may be done in the northern parts of Champaran, Muzaffarpur and Darbhanga to protect by irrigation the vast plains of rice-fields which exist there, and that the expenditure incurred on such works would be, in one sense, entirely recouped in the next famine year. While, at the same time, such works would both ensure the landlords their rents in the tract immediately benefited, and, even in ordinary years, would give some return, at any rate, on their capital.

7. The little Madhuban Canal in Champaran has afforded an excellent example, this last year, of what may be done in that district. The canal is only some six miles long, but it irrigated in 1896-97 approximately these areas of crops:—

	Acres.
Bhadai	1,100
Rice	5,800
Rabi	1,900
Poppy	2,300

The rice crop in the neighbourhood which was not irrigated failed to a large extent; some parts did not give even a 2-anna crop. It may safely be said that this canal saved entirely 5,000 acres of *bhadai* and rice crops, equivalent to at least 60,000 maunds of cleaned food grain, which, but for irrigation, would have been lost. The value of 5,000 acres of such crops, at the current prices of the time, would be at least Rs. 50 an acre, so that the cultivators concerned were Rs. 2,50,000 the richer for the canal. The capital cost of it was about one lakh of rupees only. The Famine Commission (Part II, page 72) estimated that an acre of food grain would feed from 25 to 3 persons for a year; on that basis the 5,000 acres saved by the Madhuban Canal would feed, say, 25,000 persons for six months. If ten per cent. of those persons had come on the relief works (or on gratuitous relief) for six months, they would have cost Government about thirty thousand rupees. It seems to me to be a moderate statement to say that works, such as the one in question, would, in a famine year, save more than their entire capital cost to the people immediately benefited, and would save Government about one-third of their capital cost. There are several streams in the northern parts of the three districts where irrigation works, similar to the Madhuban Canal, could be made.

8. Before discussing these, I would briefly refer to schemes which have been advanced in previous years for protecting this part of Behar. There is some information about all but the first of them in my office, and there is probably more in the Public Works Department Secretariat at Calcutta. These schemes are—

- (i) A project for a canal from the Gandak near Tribeni Ghat to command the north-western part of Champaran.
- (ii) A project (1871) for a weir across the Gandak at Batura, with canals commanding 1,979 square miles of country in Champaran, estimated at 107½ lakhs of rupees. The area of both rice and *rabi* to be irrigated was estimated at 989,500 acres.
- (iii) A project (1877) for a weir across the Bagmati river near the Nepal Frontier, with a system of canals commanding 487 square miles of country in

north Muzaffarpur, estimated at about 28 lakhs of rupees. The area of both rice and *rabi* to be irrigated was estimated at 128,997 acres. There is another project, from the same head, to irrigate 14½,800 acres of rice and 50,000 acres of *rabi* at an estimated cost of about 50 lakhs.

- (iv) A project (1877) for a weir across the Kumla river, near the Nepal Frontier, with canals commanding 460 square miles in northern Darbhanga, estimated at about 11 lakhs of rupees. The project was supposed to irrigate 60,000 acres of *kharif* and 27,080 acres of *rabi*.

The estimated cost of these projects seems to me to be very largely less than the sums which they would probably cost and there are several details of the schemes which would certainly be very materially modified by the experience which has been gained since these projects were framed. But the plans and reports concerning them would be useful in considering projects in the same localities.

9. The first project (i) is that which is now being partially carried out by famine labour. The detailed plans and estimates are being prepared by Mr. Butler, Executive Engineer of the Champaran Canals Survey Division. There is a preliminary (printed) report by myself on the scheme, dated the 9th February 1897. The cost is roughly estimated as 28½ lakhs: the canal would irrigate 80,000 to 90,000 acres of rice and 20,000 to 30,000 acres of *rabi*. I believe that there are papers about the old project in the Secretariat.

The second project (ii) was set aside, I believe, mainly on account of the great engineering difficulties connected with the weir across the Gandak. The canal, also, commanded a good deal of the southern part of the district of Champaran, where there is less necessity for irrigation than in the north. In my opinion the estimate (107½ lakhs) is very largely indeed, below the probable cost of the work. I do not at all advocate this project.

The Bagmati project (iii) is that of which a portion was commenced as a famine work this year. There is a note on it by myself, dated, 12th April 1897, which is now, I believe, with the Chief Engineer. The Bagmati river is well able to afford a supply sufficient to irrigate 80,000 to 90,000 acres of rice and 30,000 to 40,000 acres of *rabi*. It will be seen from my note of the 12th April that I am not able to fully approve of the project which is now being partly carried out by famine labour: but there can be no doubt that a more perfect scheme is possible, and I think it should be fully considered. I should roughly estimate that an expenditure of 35 lakhs of rupees would serve to give entire security to 80,000 acres of rice in the northern parts of Muzaffarpur.

The Kumla project (iv) appears to have been worked out by Major Forbes. There are many plans connected with it in my office, and a printed note, dated 6th October 1877, by Colonel Halg. It is stated that 800 cubic feet per second can be relied upon in October in bad years, and 150 cubic feet in the cold weather. This would secure 30,000 acres of rice, and say 15,000 to 20,000 acres of *rabi*. There are some difficulties about the project, as the Kumla river spills over a large tract of country and thus affords natural irrigation which, though sometimes excessive, is generally advantageous, and it would not be easy to make canals which would not interfere with this naturally beneficial action. But the project certainly deserves further consideration; it affords one of the best means of protecting a part of North Darbhanga. I understand that the loss of rent in this year alone, in the tract commanded by this project, was very large. The project might cost 10 to 12 lakhs.

10. The three old schemes which I recommend for consideration may be tabulated as follows:—

	District.	DISCHARGE OF CANAL.		Area of rice secured.	Rough estimate of cost.
		Maximum.	Minimum.		
1	2	3	4	5	6
(i) Tribeni canal from the Gandak river.	Champaran.	C. ft. per second. 1,000	C. ft. per second. 700	Acres. 80,000	Lakhs of rupees. 29
(ii) Bagmati canal.	Muzaffarpur	1,500	400	60,000	35
(i) Kumla canal.	Darbhanga.	600	150	30,000	13
		---	---	100,000	75

are under construction, the others should be carefully investigated and ultimately executed.

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(scheme A), immediately to the north
Champaran, is one which seems to offer great
for irrigation. The river is banded usually in
than one place, and the water used, mainly in the cold
weather, for irrigation. I visited the place where this river
crosses the frontier, and found 80 to 100 cubic feet of water
per second passing down the river at the end of February.
Mr. Thorp, of Luchmepur Factory, who has known the river
for years, informed me that in October there was an average
depth of 4 to 5 feet of water in the stream, which is from
150 to 180 feet broad. I should estimate that at least 400
cubic feet per second might be obtained from it in October.
The Gad, which is a neighbouring river, has a smaller supply,
but might probably be able to give a minimum supply of 100
cubic feet in October. If weirs were thrown across these
two rivers, a system of irrigation commanding from 80 to
100 square miles of country and capable of irrigating 15,000
to 20,000 acres of rice and 10,000 acres of rabi, might be
constructed at a cost, perhaps, of 5 lakhs of rupees. The
tract of country which could be irrigated from this river is
mainly rice land, but I believe it did not suffer severely this
last year. I regard this little project as one of the most prom-
ising.

The next stream of importance is the Pussa (scheme B).
I learnt from the natives on its banks that in October about
two feet of water may be taken as a minimum, a small weir
thrown across this river, which is only about 100 feet broad,
with a canal of four or five miles in length, costing perhaps
half a lakh of rupees, might irrigate 6,000 to 8,000 acres
of rice.

The Teur is the next river of any size: from this the
Madhuban canal, to which I have already referred, has been
made. Next to that, the Buckeya nadi might perhaps offer
facilities for irrigation, but I have not seen this river, and
have only heard that it has a fair supply. The catchment
seems fairly large.

The last river in the Champaran district is the Lal Buckeya
from which the Dhaka canal (scheme C) is already under
construction as a famine work. There is a printed note by
myself on this scheme, dated the 7th March 1897, showing
that a discharge of 300 cubic feet in October may be
expected (although the proof of this is not very satisfactory)
which is sufficient to irrigate 15,000 acres of rice. The rabi
discharge is uncertain, and no reliance is placed on that crop,
but the canal would certainly do good in that season, and
particularly to indigo, of which there is extensive cultivation.
The project is now being estimated in detail by Mr. Butler,
Executive Engineer. My rough estimate of the project is
about 4½ lakhs of rupees.

13. In the Muzaffarpur district, the Bagmati canal is
recommended for consideration, with a weir across the Bag-
mati; but if this is not approved, I think the discharges in
October of the Luchandi and Adwara nadis should be investi-
gated; small schemes from these may be possible for rice
lands.

14. In Darbhanga the little Bagmati, in the north-west
corner, might possibly justify a small project. There are
also some rivers in the tract marked D on the sketch* map,
which deserve enquiry. I have not myself been able to
inspect them.

15. The schemes roughly sketched in this note are tabu-
lated on the sketch map. They would afford security to
about 250,000 acres of rice, at a cost of some 90 lakhs of
rupees. I do not think that the works would prove directly
remunerative to Government, certainly not for a long period
of years, but they would be a material protection against
the severe losses which have twice in the last 25 years caused
famine in the tracts in question. In the detailed notes to
which reference has been made, I have shown that in time
the works might pay their way. I do not advocate the
immediate construction of all of them, but I strongly recom-
mend the expenditure, say, of four lakhs of rupees a year on
the Tribeni and Dhaka canals, and that, while those works

APPENDIX I.

Facts of the Famine of 1873-74.

(1) I find these figures in Mr. (Sir A. P.) MacDonnell's
book on Famine Relief in Bihar :—

Champaran District.

	Acres.
Area under <i>opant</i> food crops	577,838
Area under <i>bhadol</i> food crops, including land yielding second crop	603,800
Area under <i>rabi</i> food crops, including land yielding a second crop	475,429
Area which does not grow food crop	129,049
Total	1,785,806
Cultivated area	1,437,893

Muzaffarpur District.

	Sitamarhi Sub- division.	Sadar Sub- division.	Hajipur Sub- division.	TOTAL.
1	2	3	4	5
	Acres.	Acres.	Acres.	Acres.
Rice area	287,444	385,875	69,511	762,830
Bhadol	158,327	169,969	136,769	464,055
Rabi	128,941	178,238	177,828	484,707
Non-food crops	29,688	34,000	40,573	104,259
Total	604,098	768,082	443,671	1,815,851
Cultivated area . . . . .	...	...	...	1,438,869

Darbhanga District.

	Madhu- bani Sub- division.	Sadar Sub- division.	Tajpur Sub- division.	TOTAL.
1.	2	3	4	5
	Acres.	Acres.	Acres.	Acres.
Rice area	487,613	412,100	101,506	961,418
Bhadol	130,439	193,621	183,835	507,894
Rabi	108,973	184,104	216,907	509,984
Non-food crops	24,454	35,000	25,000	84,454
Total	699,676	824,825	526,247	2,049,750
Cultivated area . . . . .	...	...	...	1,661,280

The difference between the total of the area under crops
and the cultivated area is due to double cropping.

(2) The areas under the different crops are estimated by
Mr. MacDonnell to give, in ordinary good years, the follow-
ing quantities of food-grains :—

Champaran District.

	Tons.
Aghaul or winter rice	150,900
Bhadol or autumn crops	247,512
Rabi	118,867
TOTAL	517,269

Muzaffarpur District.

	Sitamarhi Sub- division.	Sadar Sub- division.	Hajipur Sub- division.	TOTAL.
1	2	3	4	5
	Tons.	Tons.	Tons.	Tons.
Winter rice	143,723	192,938	31,270	368,630
Bhadol	67,854	72,844	68,168	198,866
Rabi	36,750	50,825	76,212	163,687
TOTAL	248,326	316,707	166,360	731,393

* Not printed.

Darbhanga District.

	Madhubani Sub-division.	Sadar Sub-division.	Tajpur Sub-division.	TOTAL.
1	2	3	4	5
	Tons.	Tons.	Tons.	Tons.
Winter rice	218,906	206,050	43,533	468,489
Bhadoi	55,898	82,980	49,786	188,664
Rabi	30,278	52,601	92,531	175,410
TOTAL	305,082	341,631	185,850	832,563

(3) In the famine year of 1873-74, the outturn of the various crops is estimated by Mr. MacDonnell as follows:—

Champaran District.

	Tons.
Winter rice	18,862
Bhadoi	154,695
Rabi	60,000
TOTAL	233,557

Muzaffarpur District.

	Sitamarhi Sub-division.	Sadar Sub-division.	Hajipur Sub-division.	TOTAL.
1	2	3	4	5
	Tons.	Tons.	Tons.	Tons.
Winter rice	36,000	72,352	3,996	112,348
Bhadoi	34,000	70,000	43,627	147,627
Rabi	27,562	25,462	47,632	100,656
TOTAL	97,562	167,814	95,255	360,631

Darbhanga District.

	Madhubani Sub-division.	Sadar Sub-division.	Tajpur Sub-division.	TOTAL.
1	2	3	4	5
	Tons.	Tons.	Tons.	Tons.
Winter rice	41,000	25,756	10,883	77,639
Bhadoi	27,949	51,862	24,893	104,704
Rabi	10,000	15,000	70,000	95,000
TOTAL	78,949	92,618	105,776	277,343

(4) The loss of food grains due to the famine of 1873-74 may then be stated thus:—

DISTRICT.	Outturn of food-grains in ordinary good years.	Outturn in famine year 1873-74.	Crop lost.	Percentage of column 4 on column 2.
1	2	3	4	5
	Tons.	Tons.	Tons.	
Champaran	517,269	233,557	283,712	54.85
Muzaffarpur	731,383	360,631	370,752	50.69
Darbhanga	832,563	277,343	555,220	66.68
TOTAL	2,081,215	871,531	1,209,684	58.12

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Champaran { Winter crop				
{ Bhadoi				
{ Rabi				
TOTAL	517,269			
Muzaffarpur { Winter crop	868,630	112,348		
{ Bhadoi	198,866	147,627		
{ Rabi	168,887	100,656	63.23	
TOTAL	731,383	360,631	370,752	50.69
Darbhanga { Winter crop	468,489	77,639	390,850	83.43
{ Bhadoi	188,664	104,704	83,960	44.50
{ Rabi	175,410	95,000	80,410	45.84
TOTAL	832,563	277,343	555,220	66.68
GRAND TOTAL	2,081,215	871,531	1,209,684	58.12

6. So that the loss of crops due to the famine of 1873-74 may be stated thus:—

	Tons.
Winter rice	132,038
Bhadoi	228,016
Rabi	202,498
TOTAL	1,209,684

The loss of the winter rice crop was, therefore, 64 per cent. of the entire loss. The winter rice and bhadoi together made 83 per cent. of the loss: the rabi crop only caused 17 per cent. of the total loss.

7. It is usual to describe an ordinarily good crop as 16 annas. The figures in paragraph 5 work out thus:—

	Crop of 1873-74, annas.
Champaran { Winter rice	2.0
{ Bhadoi	10.0
{ Rabi	8.0
TOTAL	7.2
Muzaffarpur { Winter rice	4.9
{ Bhadoi	11.9
{ Rabi	9.8
TOTAL	7.9
Darbhanga { Winter rice	2.6
{ Bhadoi	8.9
{ Rabi	8.7
TOTAL	5.8

8. The areas under the various crops would of course be different in 1896, but on the same areas the loss of crops in 1896-97 would compare with those of 1873-74 as follows:—

	1873-74.	1896-97.
	Tons lost.	Tons lost.
Winter rice	132,038	117,891
Bhadoi	228,016	299,512
Rabi	202,498	322,066
TOTAL	779,170	739,469
Bhadoi	92,817	116,021
Rabi	51,239	136,721
TOTAL	228,016	347,074
Rabi	58,837	44,572
TOTAL	202,498	129,396

Written statement of evidence by Mr. K. G. GUPTA, Commissioner of Excise, Bengal.

The following table shows the gross receipts during the last seven years:—

YEARS.	Gross receipts.	Increase.	Percentage of increase.
1	2	3	4
	₹	₹	₹
1890-91	1,04,60,932	...	...
1891-92	1,11,29,813	6,68,881	6.39
1892-93	1,16,00,621	4,70,808	4.23
1893-94	1,21,37,096	5,36,475	4.62
1894-95	1,25,67,855	4,30,759	3.54
1895-96	1,33,77,706	8,09,850	6.44
1896-97	1,34,10,579	32,874	.24

to the abolition of *madak* and *chandu* licenses, and ₹43,871 to the export of *ganja* to the North-Western Provinces and Oudh in bond under the new arrangement. The balance of ₹1,75,369 may be directly attributed to general scarcity and famine, though it does not correctly represent the total loss sustained on this account, for the normal increase of previous years should not be overlooked. The average annual increase during the five years 1891-92 to 1895-96 was ₹5,83,355, but from this must be deducted ₹1,51,563 (₹1,07,692 due to the abolition of *madak* and *chandu* shops and ₹43,871 on account of exports of *ganja* to the North-Western Provinces in bond), as representing a permanent loss, the result of administrative changes. There still remain ₹4,31,792, or, say, 4 lakhs. The expected revenue of the year should, therefore, have been—

	₹
1895-96	1,33,77,706
Increase	4,00,000
	1,37,77,706
But the actual revenue was	1,34,10,579
Loss	3,67,128

Although the receipts of last year show a small increase, yet it is manifest that the steady growth of recent years has sustained a serious check. In the preceding five years the increase averaged 5.04 per cent., but in 1896-97 it fell to .24 per cent.

2. Taking district by district, there was in 1896-97 a gross increase of ₹3,59,806 contributed by 22 districts, while the total decrease in the remaining 25 districts amounted to ₹3,26,932. Out of this latter amount, ₹1,07,692 were due

or, say, 3½ lakhs, as due to famine.

3. The scarcity did not make itself felt till after the settlement of excise licenses for 1896-97 had been concluded. It had, therefore, its effect not so much on license fees as on the revenue derived from duty. The following table will show that, while there was an increase of ₹1,58,232 on account of license fees, the receipts from duty fell by ₹1,26,927:—

SPIRIT OR DRUG.	1895-96.			1896-97.			Increase.	Decrease.
	License fees.	Duty.	Total.	License fees.	Duty.	Total.		
1	2	3	4	5	6	7	8	9
	₹	₹	₹	₹	₹	₹	₹	₹
I.—Country spirits—								
(a) Distillery shops	8,81,324	17,95,429	D.F. 61,559 26,76,753	10,11,430	17,77,384	D.F. 59,110 27,88,814	...	...
(b) Outstill shops .	31,73,528	...	31,73,528	32,32,537	...	32,32,537	...	...
II.—Spirit manufactured in India in the English method.	18,496	4,47,798	4,66,296	23,591	3,95,189	4,18,780	...	47,516
III.—Imported spirituous and fermented liquors.	2,87,995	...	2,87,995	2,94,420	...	2,94,420	6,425	...
IV.—Beer brewed in India	16	469	485	55	452	507	22	...
V.—Tari	10,24,031	...	10,24,031	10,10,481	...	10,10,481	...	13,550
VI.—Pachwai	4,39,284	...	4,39,284	4,43,481	...	4,43,481	4,197	...
VII.—Charas	9,517	8,468	17,985	10,238	9,353	19,591	1,606	...
VIII.—Sidhi, sabji or bhang	38,057	21,441	59,498	45,481	20,083	65,564	6,066	...
IX.—Majam	1,710	...	1,710	1,495	...	1,495	...	215
X.—Madak	77,332	...	77,332	...	...	...	...	77,332
XI.—Chandu	30,360	...	30,360	...	...	...	...	30,360
XII.—Spirits used for Arts, etc.	...	1,097	1,097	...	812	812	...	285
XIII.—Ganja	12,13,321	14,67,498	26,80,819	12,77,348	14,54,174	27,31,522	50,703	...
XIV.—Opium	5,96,976	17,68,153	23,65,129	5,99,624	17,25,979	23,25,603	...	39,526
Miscellaneous . . . . .	...	...	13,844	...	...	17,862	4,018	...
TOTAL	77,91,949	55,10,353	1,33,77,706	79,50,181	53,83,426	1,34,10,579	2,41,658	2,08,784

Mr. K. G. Gupta.

4. As was to be expected, the loss was heaviest in the Patna Division, where it amounted to Rs. 1,03,373 or 3.77 per cent., the greater portion of which was under country spirits, and the remainder under tui and ganja, the three chief excisable articles consumed by the poorer classes in Behar. In the districts of the Fonthal Parganas and Palaman also there was a decrease of over Rs. 20,000, chiefly under the head of country spirits.

5. The effect of the famine on the excise revenue is more pronounced in the current year. The settlements took place at a time when the scarcity had fully established itself, and the result was highly unsatisfactory, as shown below:—

Divisions	1896-97	1897-98.	Increase	Decrease.
1	2	3	4	5
	R	R	R	R
Burdwan . . .	7,70,905	7,72,507	1,602	...
Presidency . . .	13,90,744	13,54,250	...	36,494
Rajshahi . . .	8,12,319	7,90,190	...	21,329
Dacca . . .	5,14,192	5,16,256	2,064	...
Chittagong . . .	1,73,422	1,73,415	...	7
Patna . . .	20,09,290	18,97,517	...	1,11,773
Bhagalpur . . .	10,24,270	10,09,517	...	15,759
Orissa . . .	2,34,064	2,46,168	12,103	...
Chota Nagpur . . .	10,44,353	8,12,853	...	2,31,500
TOTAL . . .	79,73,595	75,72,471	15,768	4,16,802

Net decrease Rs. 4,01,124.

The decrease, though fairly general, was heaviest in the Patna and Chota Nagpur Divisions. *Mohwa*, from which country liquor is made in the greater part of the province especially in Behar and Chota Nagpur, yielded a deficient crop, while, owing to the exigencies of the famine, a much larger quantity than usual was used as food, and as a consequence it has been selling twice or thrice as dear as in the year before. All these causes combined have very prejudicially affected the revenue.

7 The following statement shows the estimated excise receipts for 1897-98:—

Minor and detailed heads.	Actuals for the seven months ending 31st October 1897.	Probable receipts during the next five months.	Total of columns 2 and 3.
1	2	3	4
	R	R	R
Foreign liquors	1,87,180	1,17,639	3,04,819
Liquors and spirits made in India, etc.	4,39,810	3,37,174	7,66,984
Country spirits	32,57,397	23,50,757	56,08,064
Toddy revenue	7,43,046	4,07,910	11,50,956
Opium and its preparations . . .	3,56,689	2,46,193	6,02,882
Other drugs, ganja, bhang, etc. . .	6,08,854	5,65,303	11,74,226
Gain on sale-proceeds of excise opium.	9,83,664	7,29,970	17,13,614
Duty on ganja	7,66,687	5,51,887	13,18,574
Fines, confiscations and miscellaneous.	8,519	4,514	14,033
Total	75,41,932	53,04,406	1,28,46,338

The estimated actual loss is Rs. (1,34,10,579—1,28,46,338) 5,64,241 or say 5½ lakhs or 4.2 per cent. But adopting the same mode of calculation as has been done in regard to 1896-97, the revenue of the year, had the normal rate of

Actual revenue, 1895-96	1,33,78,000	+ 4,00,000	1,37,78,000
Anticipated revenue, 1896-97	1,37,78,000	+ 4,00,000	1,41,78,000
Ditto, 1897-98	1,41,78,000		

increases not been interfered with, should have been Rs. 1,41,78,000 as shown in the margin; the latest estimate, however, is only about Rs. 1,28,50,000, the difference being Rs. 13,28,000, or say 13 lakhs. The figures of the two years thus show a probable actual loss of nearly 5 lakhs,* while the real loss due to famine

1896-97	+ 23,000
1897-98	- 5,50,000

during the same period will not be far short of 16½ lakhs, viz., 3½ lakhs in 1896-97 and 13 lakhs in 1897-98. It is too much to hope that the consequences will not extend to the next year also.

Written Statements of evidence by voluntary witnesses, Bengal, not examined by the Commission.

Written statement of evidence by Mr. A. McGAVIN, Sub Divisional Officer, Rajmehal, dated 8th February 1898.

(a) *Departures from the prescriptions of the Bengal Famine Code which have occurred in the province during the recent famine.*

Severe scarcity prevailed in the Government Estate otherwise known as the Daminikoh, of the sub-division of Rajmehal, and to a less degree in a tract the area of which is about 60 square miles situated in the jurisdiction of the Bahawa police outpost in the south of the sub-division. To meet this scarcity I was provided with the following funds:—

	R
From the Estate Improvement Fund the sum of	7,277
From the Agricultural Improvement Fund	1,500
From the Road Fund	3,538

In addition to this, members of the Rajmehal Branch of the Indian Charitable Relief Committee, residing in these areas, as well as peipatetic Government officers attached to the sub-division, were provided with money from the Indian Famine Charitable Relief Fund, to relieve all cases of destitution.

Poor-houses were also opened at Rajmehal and Sahebganj, which did a great deal of good and saved many lives. They were largely resorted to by travellers on their way to and from up-country.

For the above reasons, I was enabled to cope with the distress which prevailed without being obliged to declare famine. As a matter of fact a report was submitted under section 10 of the Famine Code in which however I stated my opinion that, although the anxious circumstances of my sub-division compelled me to submit the report, I felt extremely doubtful as to the necessity for declaring famine, and in a consultation with the Deputy Commissioner at the time it was decided not to do so.

Consequently I have had no experience of the working of the Famine Code to speak of. Certain test-works were from time to time opened and tasks exacted and payments made in accordance with the Honourable Mr. Glass' tables and the e, but they failed to attract labourers and had to be closed tly after opening.

The Saoria Paharias of the Rajmehal Hills, with very few exceptions, can rarely be induced to do any manual labour, and to my knowledge not one attended any single test-work which was opened, while the Santals and other semi-aboriginal castes imbued with something of the obstinacy of the Santal nature, declined to work at the rates offered. While therefore one could not remain blind to the state of things bordering as nearly as possible on actual famine, it was impossible to ignore the results of the test-works on which basis alone famine could be declared. I was accordingly obliged to depend entirely on the other means at my disposal to provide relief for those needing it.

(b) *Degree of success which has attended the measures adopted, considered primarily with regard to the relief of distress and the saving of human life, and secondarily with regard to economy.*

The only basis I have for the evidence under this head is the result of the measures I was able to take with the money at my disposal under the Estate Improvement Fund, Agricultural Improvement Fund, Road Fund and Indian Charitable Relief Fund.

Works were opened wherever necessity existed, and a uniform rate of 2 annas 6 pie per hundred cubic feet was fixed which was subsequently raised to 3 annas. This form of labour finds more favour with Santals than the task-work

system to which they have a strong objection. Restraint of any sort in fact is odious to the Santal and he much prefers to take his own time and do whatever work he has to perform in his own way.

The nature of the work offered was the construction of tanks and bands and roads, and the rate of payment was sufficiently low to draw to them such as really needed help. All members of a family able to work, including women and children, resorted to the works, and as a rule preferred to work together on the same pit or "chowka". The works were placed in charge of village mastajirs under the supervision of the kanungo, overseer and other Public Works subordinates. Payments were made by these officers daily or as soon after as possible. I should also state that R10,974 were paid under the Agriculturists' Loans Act for purchase of seed-grain and R1,100 under the Land Improvement Loans Act. These loans afforded great relief to a large number and obviated the further misfortune of increasing their indebtedness to the mahajans on whose assistance they had greatly to rely for their maintenance.

In this sub-division R3,055-4 were subscribed towards the Indian Famine Charitable Relief Fund, and the amount actually received from the District Committee, Dumka, was R4,750. As already stated, poor-houses were opened at Rajmehal and Sahebganj, the amount expended on which was R2,485-2-10. Relief was also given to really indigent persons, unable through infirmity or respectability to attend the poor-houses, in grain and money doles.

Altogether 20,996 persons were fed at the Rajmehal poor-house and 12,631 at the Sahebganj poor-house.

The total amount paid to Committee members for distribution in the interior was R2,111-11-10.

The total number of persons relieved by Committee members under Object I was 3,696 at a cost of R1,648-3-1, and under Object III the average monthly number relieved by members was 76 persons at a total cost of R463-8.

Both the poor-houses were managed with great care and economy and were frequently inspected. The Committee members entrusted with the distribution of alms in the interior were all gentlemen, European and native, holding good positions and could be thoroughly relied on to do all that was necessary.

From personal knowledge I am able to say, that no means were neglected to relieve distress where it existed, and no reports of death from starvation were received.

With regard to economy, the rate paid per hundred cubic feet was 2 annas 6 pies and 3 annas only, that is, R1-9 and R1-14 per thousand cubic feet respectively. These rates were accepted by those attending the works without murmur, and as several members of a family worked on the same chowka and could thus do more than one a day, they could earn sufficient to maintain themselves.

(c) *Advice as to the measures and methods of working which seem likely to prove most effective in future in those two respects.*

(d) *Other recommendations or opinions thought likely to be useful in case of future famine.*

I am not prepared to offer any advice or recommendation under these heads (c) and (d) having had no actual experience of working under the Famine Code. Undoubtedly, however, I consider the task-work system unsuitable for the Santals and other semi-aboriginal tribes of the Daminikoh. The piece-work system is more to their taste, and I am inclined to believe that they would rather starve or eke out their existence in any way rather than sink their prejudices against the restrictions governing the task-work system.

Written statement of evidence by BABU GIRISH CHANDER GHOSAL, *Naihati*.

Is there any evidence that a permanent rise in the price of food-grains in India has taken place of late years? If such a rise has occurred, do you think that it is in any way connected with the fall in the Indian exchange?—There is no doubt that a permanent rise in the price of food-grains has taken place in this country. The evidence lies in the fact that now-a-days people have to pay double the price for all food-grains of what they used to pay ten years ago. Even in the harvest time,

which was always considered as most suitable for laying by provisions on account of their cheapness, the price falls by a few annas, at most a rupee in some places, and that only for a short period to enable the cultivators to meet the rent demands of the landlord or to satisfy the calls of the money-lenders, by selling a part of their stock for ready cash.

The first signs of the rise in the price of food-grains appeared in the beginning of the year 1897. It was

Mr. A. McGavin.

Babu Girish Chander Ghosal.

*Babu Grish
Chander
Ghosul.*

harvest time, but the expected fall did not occur, and the incident was attributed to temporary causes. It did not, however, turn out to be the case as the prices of food-grains hardened as the season advanced and remained above the normal with slight variations at times.

Being in the country produce trade I have experience of Patna, Monghyr, Bhaugulpore, Purnea, Malda, and the districts of the Lower Province of Bengal generally, and am in a position to say that since the above date the prices of food-grains never again fell to their previous level, but on the contrary they went upward until it culminated into the great famine of 1896, owing to successive years of short rainfall preceding that great calamity, which in her history and traditions India is never before known to have suffered from. And in this connection it should be gratefully acknowledged that there exists an unspoken grateful appreciation in the minds of the people of India of the noble efforts made by the British Government to save their lives from starvation and hunger. Such appreciation was but very insufficiently expressed by the leaders of the Indian people in their public meetings with the rulers of the country. The talk around the humble fire-sides and in the homes of the people is that it is the Great Queen who could have so successfully dealt with such a vast and unbounded calamity.

I am humbly of opinion that the first rise in the price of food-grains was owing to the increasing number of mouths which had to be fed consequent upon the peaceful government of the country under the British rule, and that the maintenance of the rise is certainly due to the fall in the Indian exchange under which the export of food-grains to foreign countries has steadily risen to an unprecedentedly large figure. The necessities of augmented trade have the effect of sending hard cash to the doors of the cultivators who cannot withstand the temptation of the hard cash and the ready sale of their produce at high prices, and this, coupled with the desire to live in a style above their station in life, leads them to part with their last grain unmindful of the consequences of a bad season which might be looming in the future.

An evidence of the permanent rise in the price of food-grains may also be found in the fact of the increasing number of coolies emigrating to foreign colonies and to the tea districts of Assam. Sambalpur in the Central Provinces, Chota Nagpore and the Santhal Pergunnahs of Bhaugulpore were principally the recruiting grounds from which the Immigration Agents, in times past, procured their labour; now, however, many other districts in India have entered the field for the supply of labour from their so-called surplus population of their so-called congested districts. But the fact is that these districts, before the rise in the price of food-grains, could with the produce of their own land easily maintain their own population at a trifling cost, but since the last two decades the price of their staple produce has risen so excessively, owing to the ever-increasing export demands, that these wild and home-loving people, who never before knew the pangs of hunger, are compelled to seek for a living anywhere and elsewhere in the world, for they could not get enough to eat at home.

Is the trade in the hands of European or native firms? When prices of food-grains rose rapidly at the end of 1896, were the stocks of rice and other food-grains large in the port? So far as the information went, were food-stocks large in the interior of the country, or in any particular province? What was the general impression as to the extent to which those stocks would prove sufficient for the food-requirements of the country without importation from abroad, and would be placed on the market, or held up?—The trade in food-grains is more in the hands of native firms than European firms in the sense that most of the internal trade of the country in food-grains is conducted by native firms, but the export trade in the same article is in the hands of European firms. There are, however, Parsee firms which do business in the export trade.

Enquiries made at the time showed that there were large stocks of food-grains in the port of Calcutta at the end of 1896, but the export went on unchecked in spite of weighty opinions expressed from various quarters in favour of its curtailment. Government set its face against any action towards restraining the course of free trade; Governors and other official authorities were consulted and they answered in a chorus of approval of the views of the Supreme Government that the principle of *Supply and Demand* should not be disturbed. While the Government

of India were thus disposed many native Principalities forbade exports of food-grains from their States and their subjects remained better off as regards their food-supply than those of the adjacent British districts.

Food-stocks were about sufficient in the North-Western Provinces and the Bengal Province, and the general impression in these places was that if these stocks were allowed to be distributed within the country through the usual channels, unhampered by export demands, the tight time might have been tided over without the necessity of having to go abroad for a supply. While the famished people were looking on, the privileged export agents carried away the life-saving grains from their midst. A panic set in, grain dealers made uncommon profits in their transaction with the exporters suspending their custom with the local *moodies* who supply the peasantry of the country. Again, when a Government agent entered a market as a purchaser of food-grains, the dealers combined and demanded a prohibitive price or refused selling at all.

Did the high prices reached at the end of 1896 lead to much speculative dealings in grain?—Decidedly yes. Speculators sprung up like mushrooms, and, as far as my information goes, the majority of such speculators were natives not Europeans.

Were these high prices maintained? Were they followed by an active import of grain from foreign ports?—The high prices were maintained sufficiently long to be oppressive to the people and burdensome to Government. It is only after the winter crops of 1897-98 were assured that the market showed an easy feeling, and now it is decidedly cheap. Even the *dhadoi* crops of the North-West and the *aus* crop of Bengal, which were normal and good all over, did not tend to reduce the strain to any appreciable extent until the early winter crop of rice was harvested between the second-half of November and the first-half of December, and the *rabi* sowings were completed and appeared promising.

There was an active import of grain from Burma, and as far as it went it gave relief to the country. Most of the paddy and rice which were imported therefrom went up-country. America made a feeble attempt to supply the Indian markets; her wheat and maize, but the enterprise did not cost much.

Can you con- of any case in which prohibition of exports would, in your opinion, be of advantage?—Ordinarily, prohibition of exports would not tend to the well-being of Indian cultivators, but on the contrary such a measure would reduce them to their old state of rustic simplicity which in this country means wretchedness. In the pre-railway time the tillers of the soil in spite of the abundance of their fields were abjectly dependent upon the mercy of money-lenders and village grocers which gave rise to the old proverb that a cultivator has a rag round his loins, while the grocers' barns are overflowing with grains. Railways, canals and highways have changed all these and have given facilities for export, and export in its turn has elevated the condition of the cultivators by coming to their door to deal directly with them without the intervention of the middleman. Money-lenders and grocers have no longer the same hold upon them as they used to have in times past. It would be a highly retrograde movement to prohibit export in ordinary circumstances. But export has its limit, it is only safe to take away the surplus produce of a country, more especially food grains. It has a tendency to exceed this limit. There is a strong belief in the minds of men of this country that export went on in full swing while the country was suffering from drought for several years in succession; and that India was permitted to send away what she needed for her home use; and that nobody thought that her resources have been reduced from the diminished production of her soil. That this want of forethought on the part of the responsible Government of the country led her to the disastrous consequences from which she is just recovering.

The story is told with confidence that on a certain time during the height of the recent famine many well-to-do men of Dacca, Faredpore, Bickrampore, and Comilla, with money in their pockets, had to travel many miles to reach the grain depôts, and had to endure much hardship to obtain their supplies. If these districts, which are known as the granaries of Bengal, had not been previously denuded of their food-supply by export hunters, the people of those places would not have suffered as they did. If I am not mistaken the Commissioner of the Dacca

Division complaisantly reported to Government that his Division would not require extraneous help to supplement the food-stocks of his districts, and yet it is a fact that enormous quantities of Burma and Cuttack rice were despatched to the Dacca districts through the Eastern Bengal State Railway, and the Goalundo Station was choked with it for a fortnight as the river transport was unequal to carry away the heavy traffic to its destination. It has also been confidently stated that within the jurisdiction

of the Dacca Division death from starvation could be counted by scores. *Babu Grish Chander Ghosal.*

If a case is to be conceived in which prohibition of export would be of advantage, I would cite, among many other instances, the case of Dacca where a few scores of human lives could have been saved by a timely suspension of export traffic to prevent the existing stocks of food-grains being taken away from the country.

Written Statement of evidence by GREGORY ULFAT HOSSAIN, late member of the Arrah Town Relief Sub-Committee, dated 19th February 1897.

I most humbly and respectfully beg to draw your attention to the fact that at the time when the recent famine was raging, the benevolent Government was compassionately pleased to help the people writhing painfully under the scourge. But for shame be it told that the manner in which some of the officers of inferior rank conducted themselves fell short by far of the charitable intentions of Government, for the fact that the lion's share of the relief fund went into the coffer of these dishonest depraved people is none but an open secret. The distribution of relief allowances through respectable Pleaders, Mukhtars and Zamindars as was done in some part of the Sahabad district was, of course, laudable, not a single farthing having been misappropriated or mispent. Nor does the extravagantly expensive system of maintaining 2 or 3 kitchen houses in every famine-stricken district commend itself to my plain reasoning, considering the enormous expense it involves, some officers of big salaries having been to be appointed as well as the very nominal help it is capable of affording to the suffering people. The system too is condemnable on three obvious grounds:—(1) firstly, the poor gentlemen as well as common people were ashamed to go and live in the poor-houses; (2) secondly, by far the great amount of expense had to be incurred than was needed; (3) thirdly, poor people living at a distance could not afford to live in the poor-houses. The poor-houses were used by beggars only. To save unnecessary expenses it will be better if the Famine Commissioners will be graciously pleased to take these facts into their kind consideration and adopt the following humble suggestions as rules of guidance for famine officers if in future (God forbid) famine occurs in any district or province:—

- I. That a Relief Committee may be formed in the Sadar Sub-Division of a district, consisting of a Collector or a District Judge, one Subordinate Judge, one Munsiff, two Deputy Collectors and three independent members as Pleaders, Mukhtars and respectable Zamindars from every mohalla of a town.
- II. That the Collector or the District Judge, as the case may be, will preside in the Committee, and a Secretary will be selected from among the members of the Committee.
- III. That one or two clerks may be appointed on such salary as the Committee may think proper and adequate.
- IV. That in every town or village of a district, a Relief Sub-Committee shall be formed, consisting of at least three independent respectable persons from every mohalla of the town or the village.
- V. That the gentlemen selected as members of the Relief Committee and the Sub-Committee shall submit to the President three lists containing the names of helpless *parda nashin* ladies, gentlemen and common people unable to work and support themselves.
- VI. That the Secretary shall register or shall have the names of the above kind of persons registered in a book kept for the purpose.
- VII. That distribution of relief allowances shall be made in cash with a view to avoid misappropriation of relief allowances in kind on the pretext of varying rates of coins.
- VIII. That in every town or village, distribution of relief allowances shall be made through respectable Pleaders, Mukhtars or Zamindars, selected

members of the Relief Committee or the Relief Sub-Committee to the *parda nashin* ladies, gentlemen and common people incapable of working and maintaining themselves. *Gregory Ulfat Hossain.*

- IX. That the gentlemen entrusted with distribution of relief allowances shall take the signature of recipients in the proper column of cards given to them (recipients), and submit a monthly certificate of proper distribution of relief allowances to the President of the Relief Committee.
- X. That every person in need of Government relief shall be supplied with a card in the form herewith annexed.
- XI. That the Secretary shall have to draw out relief money from proper Treasury and send the same for distributing it to the persons who deserve to receive it.
- XII. That the Secretary shall have to remit relief money through his paid office clerks to the members in Sadar Sub-Division for distributing to the persons residing within the town; to the District Superintendent of Police for sending the same through Police officers to the members of the Relief Sub-Committee in Sub-Division or in villages.
- XIII. That the members of the Relief Committee or the Sub-Committee shall acknowledge the receipt of relief money on the back of money challan.
- XIV. That no unnecessary delay shall be made in distributing relief allowances to the persons in need of relief.
- XV. That the members and the Secretary shall be responsible for the loss of lives of the persons on account of starvation, in case relief allowances have not reached the latter in proper time.
- XVI. That relief allowance in cash shall be fixed according to the rates of rice, dal, vegetables, salt, and wood or cow-dung cake, and this matter shall be settled by the members of the Relief Committee or the Sub-Committee.

Arrah Town Relief Sub-Committee, 1897.

Register No.

Name of recipient of charity

Rate of allowance

Date

Signature of President.

Particulars of payments.

Name of months.	Amount of payments.	Date of payments.	Signature of payee.	Signature of payer.

QUESTIONS DRAWN UP BY THE COMMISSION FOR THE GUIDANCE OF WITNESSES.

AS TO THE EXTENT AND SEVERITY OF THE DISTRESS.

1. In your ^{province}_{district} what was the area affected and its population?

2. To what was the distress due? To local failure of the rains and of the harvests, or to abnormally high prices, or both?

3. (a) Describe the extent to which the rains and the harvests dependent on them failed, as compared with the normal state of things.

(b) Were prices of food-grains much higher than in other years? Were they as high as, or higher than, those experienced in past famines?

4. Up to the time of the failure of the rains, what had been the condition of the affected area? Had preceding seasons been favourable or the reverse?

5. Under normal circumstances may the population of the affected area be considered to enjoy a fair measure of material well-being? Is there any section of the population in it which from special causes is ordinarily in an unsatisfactory and precarious condition? Is it relatively large?

6. Is the agriculture of the affected area specially dependent on timely and sufficient rain, owing to any peculiarities of soil, crops, absence of facilities for irrigation, or the like?

7. To what extent has the population of the affected area reserves of money or food for its support in the event of failure of one or more consecutive harvests? What sections of the population have not such reserves, and what proportion of the total population of the affected area is so situated?

8. How does the late distress compare in respect of its extent and severity with that experienced in any other famine of recent years in the same locality?

9. Is there any reason to suppose that the extent of crop failure, or the degree of distress, or the absence of resources on the part of the people, was under-estimated or over-estimated on the present occasion at any point of time? If this was the case, did it affect the character or amount of relief provided?

AS TO THE SUFFICIENCY AND ECONOMY OF THE RELIEF MEASURES.

10. The Famine Commission of 1879 appear to have held the opinion that the number of persons on relief in the worst months of a famine ought not to exceed 15 per cent. of the population of the affected tract (paragraph 75). Does this standard coincide with your experience? Is it liable to be exceeded in particular tracts, while being a fairly correct standard of relief as applied to the whole of the affected area in a province, some portions of which would be less distressed than others?

11. How do the relief figures of your ^{province}_{district} in the late famine compare with the standard of the Famine Commission? If there are cases in which the standard was largely departed from, can you account for them?

12. Having regard to what you consider to be a fair standard of relief under given conditions, do you think that in any part of your ^{province}_{district} the proportion of the total population relieved was larger than was necessary to prevent loss of life or severe suffering? Were persons relieved who were not really in need of relief? And, if so, to what do you attribute this?

13. On the other hand, were there any cases in which a larger proportion of the population might have been relieved consistently with the object of saving life and preventing great suffering? If so, what was the reason? Was it due

to the attitude of the people themselves, or to defective or insufficient or ill-adapted relief arrangements?

14. If the relief arrangements were defective, insufficient or ill-adapted in any cases, was the cause of this circumstance avoidable or not?

15. Judged by the mortality of the famine period, has the relief given been successful in its object? If the mortality has been in excess of the normal, is there reason to think that this might have been prevented by more extensive or more timely relief measures?

16. Were any changes made at any point of time in the scheme of relief which was followed by a large decrease or increase in the numbers on relief? Do you consider that such increase or decrease was a direct or indirect result of such changes, and that they had the effect of excluding from relief persons really in need, or of bringing on to relief persons who did not really require relief?

17. Can any connection between such changes of system and the death-rate be traced?

18. The Famine Commission (paragraph 111) considered that the best safeguard against profusion on the one hand and insufficient assistance on the other was to be found in prescribing self-acting tests by which necessity may be proved. Do you consider that this principle has been observed to the fullest practicable extent in the late famine so far as your experience goes?

19. The chief test was held by the Commission (paragraph 111) to be the exaction of labour from all those from whom labour can reasonably be required, the labour being in each case commensurate with the labourer's powers, and the wage not being more than sufficient for the purpose of maintenance. In the late famine, were all persons who could do a reasonable amount of work required to work as a condition of receiving relief?

20. The phrase "who can do a reasonable amount of work" was intended by the Famine Commission (paragraphs 133 and 146) to include women and children, so far as they are healthy and capable of labour. Have these classes of persons been subjected to the labour test in your province?

21. The Famine Commission (paragraph 111) considered that if this principle be observed, the numbers of destitute persons to whom the test of labour could not be applied would be "comparatively small." What has been your experience in the late famine as to the numbers of persons relieved, otherwise than through the operation of a labour test, in comparison with (1) the total population of the affected tract; (2) the numbers relieved on works. Have they been comparatively small? If not, what is the explanation?

22. With regard to the labour-test, have the conditions of the task and the wage been such as to constitute a stringent test of necessity? Has the task been a full one, considered with reference to the working capacity of each person? Has the wage been more than a bare subsistence wage, regard being had to the fact that it was open to the several members of a family to obtain separate relief.

23. The Famine Commission (paragraphs 128 and 146), while objecting to a "distance test," as a condition precedent to a person being received on a relief work, considered that one large work in each sub-division would prove sufficient, and that most of the workers would find it necessary to reside on the work. Have the relief works been more numerous than this, and have the workers as a rule resided on them or not? Is residence upon a relief work disliked by the people, and does it constitute an effective and a fair test of necessity?

24. Can you give statistics showing the highest percentages on the total population of persons relieved on works

("dependants" being excluded) attained in the period or periods of maximum pressure?

25. How do these percentages compare with those attained in previous famines? If they are considerably higher, what is the explanation?

26. It has been alleged that in the present famine the people have resorted to relief works with greater eagerness and at an earlier stage of distress than in previous famines. Is this your experience, and if so, do you consider this due to the greater liberality of the terms of relief as compared with those in force in former famines, or can you assign any other reason?

27. Was "gratuitous relief" mainly given through the medium of "poor-houses in which residence is a condition of relief, or in the form of cooked food in kitchens where residence was not a condition of relief, or by means of doles of grain or of money to persons in their homes?

28. The Famine Commission (paragraph 140) recognised that the "village system," or the grant of relief in the homes of the people, involved "the risk of a too free grant of relief." Do you consider that the risk was effectually prevented, and that gratuitous home relief was strictly confined to persons who were in real want and who belonged to the classes specified in your Code?

29. Has gratuitous home relief been given more largely and at an earlier date in this than in any former scarcity? If so, give the reason and say whether the change has been beneficial. Has it saved lives and kept villages and households together? On the other hand, has it in any way demoralised the people, by making them more ready to accept charity, or by weakening the moral obligation of mutual assistance?

30. State the gross cost of direct famine relief in your province ^{province} _{district}. State the number of persons relieved (in terms of units of one day's relief), and the cost of relief per unit. Compare the cost with the cost of relief in previous famines. Having regard to the comparative severity of the late distress, has relief been economically administered on the present occasion?

31. What indirect relief, in the form of loans or suspensions and remissions of land revenue, has been given? Can you say how the amount of such relief compares with similar relief given in former famines?

32. What is the net result of the famine, alleviated as it has been by relief measures, on the economic condition of the population of the ^{province} _{district}, distinguishing between the land-owning class, the cultivating non-proprietary class, the agricultural labourers, and the trading and artizan classes? Have these classes respectively been permanently injured, or will they speedily recover their former position?

33. Is there any important matter in which the scheme of relief-measures prescribed by the Code is seriously defective, or fails to meet the requirements of a particular class or particular classes of the community.

AS TO THE ARRANGEMENTS EXISTING FOR ASCERTAINING THE IMMINENCE OF SCARCITY.

34. Do you consider that the arrangements existing in your province for ascertaining and reporting failure of rainfall and crops are sufficient? Can you suggest any improvement on them?

35. If no revenue village organisation, such as patwaris, is maintained by the State in your province, how is information as to the cropped area and the condition of the crops ascertained?

36. Can the crop-returns be relied on as regards (1) the area and kinds of crops actually sown: (2) the extent to which sowings have failed: (3) the condition of the crops?

37. Are the returns obtained within a sufficiently early date after the crops have been sown to be a guide, when distress is apprehended, to the extent of the apprehended distress?

38. In the late famine were the relief arrangements of each district largely based on the agricultural information given by these returns?

AS TO THE EXTENT TO WHICH THE PRESCRIPTIONS OF THE PROVINCIAL FAMINE CODE HAVE BEEN DEPARTED FROM OR HAVE BEEN FOUND TO BE UNSUITABLE.

39. Please describe each different measure of State relief used during the late famine or scarcity in your (province, district or charge, according to the grade or status of the witness). What measures of private relief were also in operation?

40. What opportunities did you have of gaining a practical knowledge or experience of the working of these measures?

41. Which, if any, of these measures were not Code measures, *i.e.*, not authorised by the Local Famine Code as it stood before the famine began?

42. Were any of the Code measures not used in the late famine, or abandoned after trial?

43. In working Code measures of relief, what material departures were made in practice from the detailed provisions provided for such measures in the local Code? Please to answer this separately for each measure, and explain the reasons for the departures, and give your opinion as to their sufficiency.

44. State the comparative advantages and disadvantages of each measure you have seen used (A) primarily with regard to relief of distress and saving of human life, (B) secondarily, with regard to economy.

45. Can you suggest any improvement of the measures you have seen used, or any other measures which you think ought to have been used; or which ought to be tried in the case of future famines or scarcities?

46. State the particular combination of measures which you would recommend, with regard to both the considerations mentioned in the penultimate question for the tract liable to famine which you know best.

47. If you know any other tract or tracts liable to famine for which some other combination would be better, please describe those tracts, and the combinations you have in mind.

48. Which measures were most approved by the general opinion (A) of the different classes in distress; (B) of the intelligent natives not themselves in need of relief?

49. Have you any other criticisms to express on the measures of relief used in the recent famine; or any other recommendations or opinions to advance which you think may prove useful in the case of future famines?

AS TO RELIEF WORKS.

I.—Extent to which works of public utility may be available as relief works.

* 50. State the number of relief works charges under the Public Works Department and Civil officers, respectively, at the time when attendance on relief works was a maximum, under each of the following classes:—

- (a) Roads.
- (b) Village tanks.
- (c) Impounding reservoirs.
- (d) Canals.
- (e) Railways or tramroads.
- (f) Miscellaneous works.

* 51. What was the total length in miles of new roads constructed as famine relief works—

- (i) unmetalled,
- (ii) metalled.

52. What do you estimate as the average number of day units of labour that can be employed per mile of each class of road, the work in the case of (ii) including the collection and consolidation of metalling, and collection of a reserve supply for five years?

53. Do you think that all the roads constructed as relief works will be of permanent service to the community, and that they will be effectively maintained in future, or that they will probably be abandoned as soon as they fall into disrepair?

54. If the roads now constructed are all regularly maintained, do you consider that there will still be room for new

roads, should it be necessary a few years hence to open relief works; and if so, what length of new roads could be proposed in the districts principally affected in the late famine?

55. What is your opinion of the value of metal collection as a means of employment of relief labour?

56. Has metal been collected for existing or projected roads in the late famine in excess of probable requirements for the next five or ten years?

57. What is your opinion of the value of village tanks as a form of relief work—

(i) as a means of employment of relief labour;

(ii) as a means of permanently benefitting the villages in which they are constructed?

* 58. What is the total number of village tanks that have been excavated or deepened or enlarged as relief works under Public Works and Civil Agency, and the approximate number of day units employed?

59. What was the average number of workers for whom employment could daily be provided in a satisfactory way on an ordinary village tank? Can you make any suggestion for securing strict supervision over small and necessarily scattered tank works, or for preventing the whole population of the village from applying for work on the tank because it is at their doors?

60. Has the number of possible village tanks been exhausted by the recent famine works, or can we rely upon again being able to employ large numbers on such works on the recurrence of famine, say within 20 years?

61. In what districts have impounding reservoirs been constructed?

62. Can such works in these districts be regarded as in any way a protection against famine, or as increasing the powers of resistance against famine of the community for whose benefit they are constructed?

63. Is there a prospect that many impounding reservoirs could be advantageously constructed in these districts as relief works in future famines, if projects were deliberately investigated beforehand, and on the assumption that the cost of their construction must in any case be expended in some form or another, for the purpose of relieving distress?

* 64. What irrigation works, other than impounding reservoirs, have been constructed as relief works during the late famine, and what has been the approximate expenditure incurred on them as relief works?

* 65. What expenditure will be required on them, on sub-heads of construction (such as land, masonry works, etc.), that are of little use for purposes of relief works, before the works can be completed and made available for irrigation?

* 66. What is the area that these works may be expected to irrigate usually in ordinary years, and will the area that may be anticipated in years of drought be greater or less than may be expected in ordinary years?

If any such works were constructed in former famines, have the anticipations of their utility been fulfilled?

67. Do you know of any irrigation projects that can be usefully investigated with the object of providing employment for relief labour in future famines, and with the prospect that the cost of maintenance will be covered by an increase in the revenue that may be attributable, either directly or indirectly, to the works proposed?

* 68. Under what arrangements with the Railway administration interested have feeder railways or tramways been undertaken as relief works.

* 69. Generally, do you think it would be possible, after careful investigation by competent officers, to prepare a programme of large and useful public works that might be put in hand in future famines in preference to petty works, such as have been carried out during the recent famine, the conditions being—

(a) That much of the expenditure on such portions of the work as can be carried out by relief labour will have to be incurred in any case for the purpose of affording adequate relief to the distressed population, and that, if not incurred on the works proposed, will be incurred on others of a less useful character.

(b) That the cost of future maintenance of the work will either be covered by the gross revenue that may be expected from it, or, if the work will not produce revenue, will not be out of proportion to the public benefits anticipated from its construction, or beyond the means of the authority that will be responsible for such maintenance.

(c) That the completion of the work will not involve an expenditure on materials or other items out of all proportion to the expenditure to be incurred on items that can be carried out by relief works, except when the work, as a whole, is likely to prove remunerative, or when its execution sooner or later has been decided on, in the interests of the public, and without reference to the necessity for providing employment for relief labourers.

70. What are the provisions of the Provincial Famine Code regarding the maintenance of a programme in each district of famine relief works, with sanctioned plans and estimates? Has the Code been in practice observed, and were plans and estimates for the works entered in the district programmes ready prepared when distress appeared? If plans and estimates were not ready, what was the reason?

II.—As to large and small works, and the distance test.

71. What, in your opinion, is the greatest distance at which the distressed inhabitants of a village may be induced to attend relief works—

(a) when they return every night to their villages;

(b) when accommodation is provided on the relief works?

72. Do you think it would be practicable to withhold relief from all fairly able-bodied labourers who refused to attend relief works at the distances stated in reply to the last question?

73. Would you recommend conveying relief labourers long distances of over 100 miles by rail or steamer to any large public works on which there is a strong demand for labour, or in which their labour could be very usefully employed, in preference to employing them near to their own homes on petty works of little use to any one, and the construction of which would never be contemplated, except for the purpose of affording employment for distressed labourers?

74. In the late famine has residence on the works been the rule or the exception?

75. Has residence been made a definite condition of relief, or has it incidentally resulted from the small number of relief works open and the distance of them from the homes of the majority of the workers?

76. Are you in favour of making residence obligatory, or of indirectly inducing it by concentrating the works? Have you any evidence that when such a test is not enforced, the relief works attract many persons not actually requiring relief? Do you consider that a high task and low rate of wage are in themselves sufficient tests?

77. Is residence on the works so distasteful to the people that they will undergo extreme privation before they submit to it? Can you point to any instances in which this feeling has prevented relief offered under condition of residence from being effectual? Or any in which it has passed away or become less intense after a short trial?

77A. Within your own observation is the objection to go long distances for work or to reside on relief works so strong in particular localities or with particular tribes or castes as to prevent relief offered under such conditions from being effective?

78. If famine were widespread in the province, would the disposable establishments be large enough to supervise works so numerous and so arranged as to allow the majority of the workers to return daily to their homes?

79. To enable relief workers to come to a relief work daily from homes several miles distant and yet to earn the full famine wage, have reductions for "distance" been made in the task of such persons? Refer the Commission to the rules (if any) on the subject, and explain how they were

worked. Were such "reductions" allowed when hutting accommodation was provided on the works? What precautions were possible to prevent distance being overstated, especially in the case of those who did not return to their homes every night, but found shelter in adjacent villages?

80. What was the cost of hutting accommodation per worker?

81. Did the cold and discomfort attendant on residence on the works affect the health of the people?

82. Was it necessary to provide blankets and bedding for the people in consequence of residence being enforced?

83. Is the proportion of "dependants" relieved on the relief works less when works are small and numerous than when they are large and few? How do you account for this?

III.—Task-work and piece-work.*

84. What was the proportion of labourers employed on task-work and piece-work, respectively, on the relief works under your charge, during the late famine?

85. Are you of opinion that piece-work is suitable for the employment of relief labourers in all cases?

86. If not in all cases, do you think that it is suitable in any? If so, specify the conditions under which you would generally recommend its introduction.

87. Do you consider the objections taken by the Famine Commission (paragraph 133) to piece-work as the predominant form of relief on works are overstated, or can be removed or lessened by administrative expedients? Or that they are on the whole less important than those which in your experience may be urged against task-work?

88. What arrangements would you recommend on works carried out under the piece-work system for labourers who might be too weak or incompetent to earn a subsistent wage at the rates offered, but are nevertheless not sufficiently helpless to be proper recipients of gratuitous relief, either on the works or in their own villages?

89. Would you propose any arrangements limiting the amount to be earned on piece-work by expert and able-bodied labourers who might be able to execute far higher tasks than those assumed as the basis for the piece-work rates? If so, state what arrangements you would propose.

90. What is the size of the party to which you would make single payments for the work done, e.g., in the case of earthwork how many diggers, with their own complement of carriers, would you put into one gang, or what would be the average number of diggers and carriers together forming a gang, and to whom a single payment should be made?

91. Are you of opinion that if payment for work done is made to the head of such a gang, as is referred to in the previous question, the amount paid will fairly be distributed by him among the members of the gang? Have complaints of unequal or unfair distribution been common when this system has been adopted?

92. Can you give any idea of the reduction that may be made, both in numbers and cost of special establishment, by the substitution of piece-work for task-work?

93. Do you think there would generally be any difficulty in inducing the people to attend works on the piece-work system if works on the task-work system have not been previously opened?

94. What is in your opinion the most convenient system of classifying relief labourers when employed on task-work?

95. What wage would you propose for each class in terms of the grain staple in general consumption by the classes from which labourers are drawn, expressed in *chattaks*?

96. Is it necessary to maintain the alternative system given in the Famine Codes under which wages may be calculated according to the cost of the component parts of a day's ration?

96A. Would you propose a different task and wage for men and women within the same class?

97. How would you classify, task and remunerate children—

- (i) above 12 years of age,
- (ii) below ditto.

98. What do you consider the minimum age at which children should be employed as workers?

99. What penalties would you propose for labourers who fail to perform the task set them, and how would you enforce them?

100. Are the present restrictions as to fining below the minimum wage necessary or expedient?

101. Have considerable bodies of relief workers been on the minimum or D wage for a continuous period? Has it resulted in enfeebled health?

102. Are you in favour of allowing all labourers to earn something in addition to the normal wage proposed in your reply to question 12 in the performance of a task in excess of the normal?

103. Are you in favour of paying a wage on Sundays, or one rest day in seven, and if allowed, what condition as to previous attendance would you propose as entitling to a rest day wage?

104. Do you consider it possible to introduce a standard task for all carriers as suggested in paragraphs 9 and 10 and in Appendix I of Mr. Higham's Report on the Management of Relief Works?

105. Do you think that the formula proposed in Appendix I of Mr. Higham's Report for determining a *reduced level*, in which allowance is made for the initial effort in each trip, for the vertical lift, and for the actual horizontal level is one that may be generally accepted for the purpose of a measure of the work done by carriers. If not, what modification of the formula would you propose?

106. Assuming that the reduced level is calculated as proposed in Mr. Higham's formula, or in any modified form of it that you may prefer, what is the *duty* that you would assign to an ordinary famine carrier, the *duty* being the number of cubic feet carried in a day multiplied by the reduced level in lineal feet, the value suggested by Mr. Higham being 10,000?

107. Do you think it possible to instruct the works establishment ordinarily available on relief works to arrange for the disposition of labour so as to secure, at all times, the best proportion of carriers to diggers, that may be possible under the circumstances; diggers being made to carry when the proportion of carriers is too low, and carriers being as far as possible employed in digging, even with reduced tasks, when carriers are in excess?

108. What is in your opinion the best unit for task work, that is, the size of the party to whom a given task is allotted and all the members of which should be liable to fine if the task is not performed?

109. Do you know anything of what is called the Black-wood system, and do you consider it preferable to ordinary task-work or to piece-work? If so, state your reasons?
(For Bengal only)

110. Have you had any experience in what has been called (North-Western Provinces) the modified intermediate system, and if so, do you consider it preferable to task-work under the system laid down in North-Western Provinces Circular No. 18, dated 5th December 1896, or to piece-work in which payment is made to the head of a working party simply with reference to the quantity of work done, and without any reference whatever to the constitution of the party?

111. If you consider this system preferable to the others, (North-Western Provinces) would you advocate its adoption on all relief works, whatever the degree of the distress? If you consider it inapplicable in districts in which the distress is very acute, please state your reasons?

112. In what proportion have the adult male workers stood to the women and children? Has it varied greatly in different districts and in the same districts at different periods? Has the proportion differed in the same district and at the same point of time on task-work and piece-work?

113. Can you account for the great preponderance of women and children on the relief works when these exceeded two-thirds of the whole number? Did the adult males find private employment at wages in excess of the famine wage? If so, was it really necessary for the State to support their wives and children?

113A. When failure of crops has caused great rise of prices and expectation of famine in a district, but its circum-

* It is desirable that the witnesses should have read the recommendations contained in Mr. Higham's Final Note. Questions 84 to 93 are intended only for witnesses who have had experience of piece-work.

stances are such as not to justify the opening of relief works or even of test works, is it good policy to at once arrange for special employment of labour by the Public Works Department on ordinary terms? Would such action enable large numbers of labourers to retain longer their independence and their full working power, and in that way would it stave off the time when large numbers become so pinched that private charity and mutual help cease, and famine relief becomes a necessity?

113B. After a famine has been ended by good crops and a fall of prices, is it sometimes advisable to make provision for special employment of labour by the Public Works Department on ordinary terms in order to assist the very poor who have been left without resources, till a continuance of better times has completely restored them to their normal condition?

113C. Under existing rules of account would expenditure incurred in the cases and under the conditions described in the two preceding questions be met from the budget provision for ordinary public works, or would it be charged to Famine Relief?

113D. Have you any suggestions to make with a view to giving more precision to the summary of "Principles for regulating expenditure upon public works in time of famine," circulated to Local Governments by the Government of India's Famine Circular No. 16—104-1 F., dated 13th February 1897, or have you any criticisms to offer?

IV.—Relations of Civil and Public Works Officers in connection with the management of relief works.

114. Can you define the classes of relief works which may in your opinion be most conveniently carried out by Civil and Public Works officers respectively?

115. What powers of control, if any, do you think should be exercised by the Collector and Commissioner, respectively, in regard to the management of relief works which have been entrusted to the Public Works Department?

116. In the case of such works what are the matters for which, in your opinion, the Collector and the Executive Engineer, respectively, should be held responsible?

117. Do you think it desirable that any powers of control reserved to the Collector in the case of works carried out under the agency of the Public Works Department should be delegated to or exercised by his Assistants?

118. What class or classes of men do you think most suitable as officers in charge of a relief work camp, it being assumed that the services of all available Public Works officers and subordinates are required for setting out and supervising the work, conducting and checking the measurements, etc., and on the general duties of inspection and control?

119. Do you consider that the officers in charge should, in the case of works carried out by the agency of the Public Works Department, be placed under the direct orders of the officers of that Department?

120. Do you think that the officers of the Public Works Department who are responsible for the execution and inspection of relief works, can or should also undertake the control of all other matters within the relief camp, such as the payment of labour, the conservancy arrangements, the management of kitchens, bazar arrangements, etc.?

121. Do you think it necessary or desirable that either the officers in charge of relief camps, or the inspecting or controlling officers should be vested with magisterial powers for the maintenance of order in the camp, and if so, to what extent?

122. Was there any essential difference between the systems of management adopted on works under Public Works and those under Civil agency?

123. Do you consider that any of the works carried out by the Civil officers might, with advantage, have been transferred to the Public Works Department, or, *vice versa*, that any works were carried out by the Public Works Department that should have been left in the hands of the Civil authorities?

V.—Other details of management.

* 124. At what intervals do you consider that the payments of wages should be made—

- (i) to labourers on task-work,
- (ii) To those on piece-work?

* 125. In the case of task-work, would you adopt the *piece* unit for payments, or pay to the nearest pie, as worked out by the ready reckoner?

* 126. Do you recommend that payments should be made by independent cashiers or by the gang muharrirs?

127. Has it been the practice in any works to require *chalan* from civil or village officers before admitting newcomers to the works, and if so, do you consider it a desirable practice? What was done in such cases with labourers presenting themselves without a *chalan*?

128. What is your experience in regard to members of aboriginal hill tribes?

(i) Has there been much difficulty in inducing them to attend the works?

(ii) When on the works, have they worked steadily, carried out their tasks and been amenable to discipline?

129. What are the maximum and minimum number of labourers that should form a single charge?

130. Are you in favour of kitchens in all cases in which relief is given to non-working children? If not, under what circumstances would you recommend cash doles?

* 131. What do you consider, as a result of your experience, may be considered a fair ratio to the value of the work done if performed by ordinary labour at the ordinary rates of—

(i) the payments actually made to the labourers employed, including the Sunday or rest day wage;

(ii) the total cost of the work, including relief to dependants and all incidental charges?

And support your opinion by statements showing the general results of all the operations under your charge?

* 132. Have you any suggestions to make on the question of famine accounts and returns?

VIA.—Interference with the supply of labour to private employers.

133. Have you received any complaints from the agents (For Government officers of railway or other public companies, contractors, planters, or other private employers, that the opening of relief works affected the supply of labour which they were desirous of employing? If so, give particulars of the complaints.

134. Did you think there was any foundation for any of these complaints, and if so, was it possible to do anything to meet them?

135. Were the wages or the rates per unit of work done paid by such employers in excess of the normal wages and rates in ordinary seasons, or did they follow in any way the rise in the price of grain?

136. Do you think the rates paid by the employers were insufficient to enable an ordinary able-bodied family accustomed to labouring on works to earn a bare subsistence at the market rates for grain that obtained?

137. What arrangements, if any, would you propose in future famines to prevent relief works attracting labour that would otherwise go to private employers?

138. Can you say if relief operations were assisted in any way by the employment offered by private employers of all classes to able-bodied workers in their immediate neighbourhood other than professional earth-workers? Are you aware whether any works were undertaken by them with this purpose which but for the existence of distress would have been postponed to more later date, or whether any special efforts were made or facilities afforded with the object of assisting in the relief of distress?

139. Do you think it would be possible in future famines to utilize the agency of private employers in any way for the purpose of providing more extensive employment for the distressed?

VIB.—Interference with the supply of labour to private employers.

140. Do you consider that the supply of labour to the (For employers of labour works under your control was injuriously affected by the opening of relief works in the neighbourhood or at a distance?

NOTE.—(Questions marked*) may be answered by one officer specially deputed for the purpose, or, if the Local Government prefers, the information may be given in the final famine report of the Province, or in reply to the Government of India's Resolution (Revenue) No. 31, dated 25th October 1897, recorded on Mr. Higham's Report.

141. Did you find it necessary to revise your rates after relief works had been opened? If so, give particulars of the rates before and after the opening of relief works, and compare them with those that you have paid in ordinary seasons for the same class of work.

142. How far from your own works were the relief works which you consider interfered with the supply of labour?

143. Have you made any complaints on the subject to any of the officers connected with relief works, and if so, with what result?

144. Do you consider that the establishment of the relief works complained of was necessary as a means of preserving life, or that without them the people who attended them could have found sufficient employment in your own works and elsewhere to earn at least a bare subsistence for themselves and their dependants?

145. If you consider that Government relief of some kind was necessary, do you think it would have sufficed to give it in some other form than relief works, or to have opened relief works on a different principle from that actually followed? If so, state your views on these points.

146. Do you think that it would have been possible to employ local labour in distressed districts upon works under your control, and to have obviated the necessity for Government relief works in the neighbourhood, if Government could have made arrangements for the sale of grain to all labourers on your works at privileged rates considerably below the market rate?

147. Have you any other remarks on the subject of relief works that you would like to lay before the Commission?

AS TO GRATUITOUS RELIEF.

148. What percentage of the population of the affected area was placed on gratuitous relief at the period of maximum pressure?

149. Did the persons so relieved mainly belong to the agricultural classes resident in rural areas?

150. Do you consider that all the persons thus relieved were incapable of work on a relief work, and were without relatives bound, and able to support them, and had no resources of any kind?

151. In ordinary years how are such persons supported, and why should famine or scarcity throw them upon the State for support?

152. Were the persons who received gratuitous relief in their homes chiefly women and children? To what extent did the women belong to the *parda nashin* class?

153. Can any reliable estimate be formed for a given tract of the number of persons requiring gratuitous relief in their homes during an acute famine? Will the numbers vary with the severity and stage of the distress?

154. If the numbers of relief workers attending the relief works open in a district are small, may it be presumed that no great amount of gratuitous relief is required?

155. In some provinces it appears to have been the practice to require the incapable poor who had able-bodied relatives to accompany the latter to the relief works and there to remain as "dependants." Do you approve of this practice as a test of necessity?

156. Would you give gratuitous relief to an incapable person having an able-bodied relative bound to support him, who declines to go on to the relief work?

157. May it be presumed that gratuitous relief at home is very popular with the people, and that it is sought for by many who are not absolutely destitute or who are capable of labour on the relief works?

158. Was the circle and inspection organization at your disposal sufficiently strong, vigilant, and well-informed to restrict gratuitous relief to those who were incapable of work and would otherwise have starved? Describe the precautions taken.

159. Do you think that the successful administration of this form of relief requires a larger staff of supervising officers in the superior grades than any other kind of relief?

160. Does the acceptance of such relief place any social or caste stigma upon the recipient?

161. Does the knowledge that gratuitous relief is given by the State lead to the drying up of private and village

charity quicker than would otherwise be the case, and tend to make the people cast their customary obligations for the support of the poor of the locality upon the State?

162. Could some of the persons to whom gratuitous relief was given have been employed on light manual labour on relief works in or near their village?

163. Could such work have been provided by assisting the land-owners of the village to undertake the construction of tanks or roads or other village works?

164. Central kitchens, where cooked food is provided for all comers without any condition as to residence, have by some officers been preferred to gratuitous relief in the homes of the people, at least in the early stages of distress, or when distress is on the wane. What is your opinion on this point?

165. What are the social and caste feelings of the people as to receiving cooked food in State kitchens? Would the substitution of kitchens for gratuitous relief in the form of grain or money doles, practically exclude, on account of these sentiments, certain classes from relief who really need it?

166. Apart from the sentimental difficulty, would it be practicable to maintain a sufficient number of kitchens so as to be within the reach of all persons requiring gratuitous relief?

167. Was gratuitous relief given in the form of grain or of money? Which form do you prefer?

168. Was it given in the actual homes of the people, or were they required to repair periodically to a central place to receive it?

169. Within your observations was there much malversation or extortion on the part of patwaris or other subordinates employed in the distribution of gratuitous relief? Were there any instances in which persons paid money, or surrendered part of the dole, in order to be placed on the gratuitous list?

170. To what extent was the existing revenue or police organization by villages or larger groups utilized in ascertaining the persons requiring home relief and afterwards in distributing such relief, and how far had it to be superseded or supplemented?

171. To what extent was gratuitous relief administered through voluntary unofficial agency?

AS TO POOR-HOUSES.

172. Was the population of the poor-houses in your ^{province} _{district} large at any point of time, or continuously so throughout the famine period?

173. From what classes of the community were the inmates chiefly drawn?

174. Did persons of the better castes or of respectable position object to resort to the poor-houses for relief? Would any degree of pressure have induced them to go there?

175. Compared with any experience you may have had in former famines, do you think the people generally showed decreased reluctance in the late famine to accept poor-house relief? If so, to what do you attribute this?

176. Was the mortality of the poor-house population exceptionally high throughout the period, or in any particular months? Can you account for this?

177. To what extent were the inmates of the poor-houses persons who had wandered from other districts within the province, or from other provinces, or from Native States?

178. From the physical condition of the persons entering the poor-houses and the distances they had come, what opinion did you form as to the severity of the famine, and the degree to which it had broken up households and caused wandering?

179. Were any measures taken to keep down the population of the poor-houses by drafting to works or to their homes all who could properly be thus disposed of? Was this systematically or spasmodically done?

180. Is the poor-house ration prescribed by the Famine Code sufficient? Had the dietary to be varied in the case of weak and sickly persons?

181. Are the rules and appendices of the Famine Code as to the management of poor-houses sufficiently explicit and detailed, and in all respects suitable? Can you point out any defects in them and suggest improvements?

182. Are legal powers required to enable relief officers or district authorities to send persons found begging and wanderers without any means of support and persons who, being able, refuse to work at the relief works, to poor-houses, and to detain them there? Was compulsion in this direction in practice used?

183. Were endeavours made to get work out of poor-house inmates, and with what degree of success?

184. Had any compulsion to be used to detain persons in the poor-houses? Were the inmates free to leave when they chose? Were the departures or escapes numerous?

AS TO RELIEF CENTRES.

185. Was it found necessary to open relief centres where doles of grain or money were distributed, as an alternative to giving similar relief in the homes of the people? Under what circumstances was this necessary?

186. When relief centres were thus established, was work exacted as a condition of relief from able-bodied persons? What kind of work was exacted?

187. Did the attendance at relief centres tend to become unmanageably large? Was the collection of large numbers of persons at such centres found to be productive of epidemic disease?

188. Does the expedient of relief centres as a substitute for village relief and an organized system of relief works in the early stages of distress commend itself to you?

189. In your experience would it have been better to have completed the village relief arrangements and to have opened regular relief works at an earlier date than was actually the case, in localities where relief centres were resorted to?

190. Are there any special tracts of country or any particular conditions of the population which make relief centres preferable to village inspection and village relief and to regular relief works?

191. Approximately what area was a relief centre expected to serve?

192. Was voluntary unofficial agency available and utilised to any large extent in the working of relief centres?

AS TO RELIEF KITCHENS.

193. What is your view of the functions of relief kitchens at which cooked food is supplied to destitute persons without the condition of residence?

194. Are they required chiefly in connection with relief works for the non-working children and other dependants of relief workers, or may they advantageously be established elsewhere for the relief generally of the incapable poor?

195. At the beginning or end of a famine to what extent is it expedient to substitute kitchens for gratuitous relief in the houses of the people?

196. Was cooked food given at the relief kitchens to all applicants, or only to those furnished with a kitchen ticket by an officer or village headman?

197. When such kitchens became numerous, was strict supervision over the persons in charge difficult to maintain? Was there waste or misapplication of food? What arrangements to prevent this were made? Were the kitchens ordinarily placed under the direct charge of officials, or of zamindars and other private persons?

198. Is it preferable to relieve the non-working children and other "dependants" of relief workers by means of cooked food, or by money doles to the parents? In your experience could parents to whom money was given for this object be trusted to expend it on their children?

AS TO LOANS TO CULTIVATORS AND LAND-HOLDERS.

199. To what extent have State advances been made to land-owners and cultivators for land improvements, for seed-grain and cattle, and for subsistence, in the late famine?

200. In the case of money advanced for land improvements, have the recipients, as a rule, spent it on the object for which it was lent, namely, on the employment of labour? Or have they otherwise utilised it?

201. Have the sums advanced for cattle and seed been of much benefit to the cultivating classes? Could more money have thus been advantageously spent?

202. What periods for recovery have been fixed for the different classes of advances?

203. Have advances been given to land-owners and cultivators for purchase of food, and under what restrictions as to the amount advanced and as to the time of the year in which the advance was made?

204. Do you approve of the principle of such subsistence advances, or do you think that cultivators requiring money for food should be required to submit to the self-acting test of accepting work on a relief work?

205. Is it more economical to aid by such advances cultivators who possess some property in land and cattle than to offer them work and wages?

206. Would not every cultivator want to borrow instead of going to the relief works, and would not this mean a very large outlay by the State on loans, and an increase of indebtedness among the cultivators?

AS TO SUSPENSIONS AND REMISSIONS OF LAND-REVENUE.

207. To what extent has land-revenue been suspended or remitted in the parts of your $\frac{\text{province}}{\text{district}}$ affected by the late famine?

208. Have measures been taken to secure that the relief thus given reached the cultivating tenant? Does the law provide for this? If not, is legal provision desirable?

209. Has this form of relief been of much advantage to the land-owning and cultivating classes? To what extent has it kept them from the relief works, or tended to prevent them from falling into debt?

210. Do you think that the land-revenue which has been suspended and not remitted will be recovered without pressing severely on the land-holders, should seasons be good?

211. Will such recovery be spread over several seasons by means of instalments? Will the corresponding rent suspended be distributed in similar instalments?

212. Does suspended rent carry interest? If so, ought it to do so?

213. Has the Government power to direct suspension of rent on estates held free of land-revenue, when it directs suspensions of rent and revenue on revenue-paying estates? Is such power necessary?

214. In regard to suspension and remission of land-revenue in temporarily-settled tracts, do you think it might with advantage be made a general rule of practice that in regard to estates held by self-cultivating as distinct from rent-receiving owners, when the crop is reported to be, say, below a 4-anna one, and only sufficient to feed and clothe the owners and their dependants and cattle, the proper treatment is immediate remission, not suspension?

215. Can you form any idea to what extent the private indebtedness of the land-owning and cultivating classes has been increased through the famine? Do the stamp or registration receipts indicate increased borrowing and more transfers of land? Has the borrowing in many cases been on a scale which must involve ultimate ruin to the borrower?

AS TO THE USE MADE OF FORESTS.

216. What measures were taken to open State and private forests to the people for grazing, or for collection of grass or leaves, or of edible fruits, roots and grass seeds; and what was the effect of such measures?

217. Do you think that the forests might have been more fully made available for these purposes than was the case?

218. Were any departmental operations undertaken for collection and despatch of compressed grass to the distressed tracts, and with what result?

219. What kind of food do the people get out of the forests?

AS TO ORPHANS.

220. How should orphans who have been maintained by the State during famine be disposed of at the end of a famine?

221. In the case of orphans who, during the famine, have been temporarily made over by the relief officers to private orphanages and payment made by the State for their support, should the Government continue its aid to the private orphanages after the famine?

AS TO PRIVATE CHARITABLE RELIEF AS AUXILIARY TO STATE RELIEF.

222. Have you any suggestions to offer regarding the statement of the objects to which private subscriptions for relief of distress caused by famine may legitimately be applied as set forth in the *Gazette of India* of 9th January 1897.

223. Do you think any of these objects trench upon the field of Government relief operations?

224. In view of the fact that during the currency of a famine the Government makes itself responsible as far as may be practicable for the saving of life by all available means in its power, do you consider the statement of the second object satisfactory; if not, how should it be modified?

225. Do you think the second object could properly be restricted (a) to the giving of clothing and other extra comforts to the orphans, and (b) to meeting the cost of their education in some useful craft befitting their station in life and of their maintenance after the end of the famine?

226. Are any special rules or measures necessary to prevent overlapping of charitable and Government relief under Object III; if so, what would you suggest?

227. Do you consider the opening of grain shops, where wholesome food-grains would be sold at rates below the prevailing market rates, a legitimate method of giving relief to respectable persons with small fixed incomes who, though suffering great privations from abnormal rise in prices, would not accept purely gratuitous relief either from Government or from the Charity Fund?

228. Is the opening of these cheap grain shops likely to interfere with private trade, provided the benefit of them be extended only to a selected number of persons? Were such shops started in your district, and did they interfere with private trade?

229. Are you aware that the opening of these shops from the Indian Famine Charitable Relief Fund operated to steady the market and to prevent a fitful raising of rates?

230. To render the help effective, do you think that the relief to broken-down agriculturists should not be confined to the period when acute distress is subsiding, but that it should be given just before the commencement of the agricultural season, even though distress might then be at its height?

231. What class of agriculturists should generally be helped under Object IV?

232. Do you think the Charity Fund could be properly applied in relieving agriculturists who are in a position to get statutory loans (*takavi*) from the Government?

233. Do you think it could be usefully spent in supplementing *takavi* advances where they are not enough to meet all the agricultural requirements of the recipient, including the subsistence of himself and his family, during the interval between the sowing and the harvest?

234. Do you consider the operations of the Indian Famine Charitable Relief Fund as supplementary to Government relief have served a useful purpose; if so, in what way?

235. Can you describe briefly the nature and the extent of the relief granted from the Charity Fund in your province?

236. Can you give the number of persons relieved under each object in your province?

237. What form of relief under Object I was the most popular and evoked the greatest gratitude?

238. What form of relief under Object III did the greatest amount of good at the smallest cost to the fund?

239. Do you think it was right to spend the bulk of the fund in helping broken-down agriculturists?

240. Do you think the expenditure of such a large portion of the fund under this head has, besides doing substantial good to the persons helped, resulted in great economic advantage to the country generally?

241. Can you state what is the approximate area sown with aid from the Charity Fund in your province?

AS TO EMIGRANTS AND WANDERERS.

242. What arrangements were made for the relief of starving wanderers? Were the numbers of such wanderers

so large as to attract attention? If so, to what causes was their presence due?

243. Would there have been so much wandering had more works been opened or village relief or relief centres more largely extended? Is it possible by any relief methods to prevent jungle people, or people with whom it is a custom to migrate at certain seasons of the year, from wandering?

244. Was the death-rate of the ^{province}_{district} sensibly affected by deaths among wanderers in poor-houses or on relief-works?

245. Were the wanderers persons ordinarily residing within your ^{province}_{district}, or were they from others ^{provinces}_{districts}, or from Native States? If from other ^{provinces}_{districts} or from Native States, why were they attracted to your ^{province}_{district}?

246. Was any difference made in the treatment of wanderers from your own ^{province}_{district} and those coming from other ^{provinces}_{districts} or from Native States?

247. How do you think wanderers or emigrants from other ^{provinces}_{districts} or from Native States should be dealt with?

AS TO THE MORTALITY DURING THE FAMINE PERIOD.

248. What was the ratio of deaths per thousand of population in the famine area of your ^{province}_{district} for the five-year period 1891-95 preceding the famine? What was this ratio during 1896 and 1897?

249. How far has the higher ratio in the latter two years been due directly to scarcity of food, or to the indirect effects of such scarcity?

250. If, in spite of the privations consequent on scarcity of food, there has been little or no increase in the ratio of mortality, do you attribute this result entirely to the success with which the distress has been met by relief measures?

251. In dry years, unaccompanied by scarcity, the health of the people, it is believed, is ordinarily very good and the mortality abnormally low? The year 1896 was an exceptionally dry year, and as a consequence the mortality would presumably, under ordinary circumstances, have been below the average; would it not seem reasonable to attribute to causes connected with scarcity not only all mortality in excess of the normal death-rate, but also the difference between the abnormally low death-rate of a year of light scanty rainfall and the normal death-rate of years of ordinary rainfall? Would not the compensating influence on the public health resulting from exceptional dryness of seasons tend to mask the full effects of scarcity of food?

252. On the other hand, an abnormally dry season often results in a short supply of potable water as well as to a concentration of impurities in such supply; do you attribute any part of the excessive mortality during the period of famine to this cause of unhealthiness? Do you think that cholera may have been originated or intensified by this cause?

253. Prevalence of bowel-complaints, dysentery and diarrhoea in communities leads to a suspicion that the food-supply is insufficient, or unwholesome or badly cooked. Did these diseases cause a high mortality in the famine area of your ^{province}_{district}, and could their prevalence be ascribed to an insufficient or unwholesome dietary?

254. Do you consider the diet supplied to the different classes of relief-workers, to the poor-house inmates and to those fed at the kitchens, to have been sufficient to maintain the recipients in health? Would you, as a result of your own observations, suggest any alteration in the scale of diet laid down in the Famine Code?

255. Can you state the number of deaths which were directly due to starvation in your ^{province}_{district} during the famine? Also the number of those who died indirectly from privation? Was the mortality greater amongst women than amongst men, and amongst children and the aged than amongst adults? Did parents frequently, under stress of want, neglect or abandon their children?

256. Of the deaths due to starvation, how many can you enumerate which could have been prevented by the timely

intervention of the State? Explain, if you can, how in these cases the relief measures adopted by the State failed in saving life?

257. Were, in your opinion, the measures of State relief defective either in principle or in their working? Do you think the mortality amongst the people in receipt of State aid was to any extent due to insanitary conditions prevailing in the relief camps, poor-houses, and food kitchens, and can you make any proposals with the object of securing improved sanitary conditions in future famines? Was every practicable precaution taken to provide and protect against contamination pure water-supplies for relief-camps and poor-houses?

258. Was the staff of Medical Officers and Hospital Subordinates sufficient during the famine, and were they provided with an adequate supply of medicines and medical comforts for the use of the sick?

AS TO THE PRESSURE OF POPULATION.

259. Has the population of your ^{province} _{district} increased since the taking of the census of 1871? If so, will you state what this increase has been from 1871 up to the end of 1896, this latter being probably the latest year for which the complete figures are available?

260. Is there any evidence of a continuous increase in the birth-rate or decrease in the death-rate?

261. What has the average increase of population been per cent. per annum for each year included in the period mentioned?

262. Do you attribute this increase solely to the natural and unrestrained fecundity of the people, or are there other, and if so what, additional causes?

263. What effect on the growth of population in India would you assign to the enduring peace maintained within our borders, to the suppression of infanticide and widow-burning, to sanitary works and improvements, to the extension of vaccination, and to the strenuous endeavour to prevent the loss of a single life in periodically recurring famines?

264. Has the area under food-grains in your ^{province} _{district} increased *pari passu* with the increase of population? Or has the food-producing capacity of the ^{province} _{district} been increased by irrigation and improved methods of cultivation at a rate sufficient to meet the wants of the increasing population?

265. What importance do you assign to this growth of population in bringing about in ordinary years an increase in the price of food, and so rendering existence more difficult and precarious?

266. Have the wages of the labouring classes increased as rapidly as the prices of their food-stuffs?

267. Are increase of population and higher prices, unaccompanied by a corresponding rise in the wages of the working classes, indications of diminished stocks of food in the country? Would scarcity be likely to intensify more rapidly into actual famine under conditions of dearer food and a greater number of people earning low wages?

268. The immediate effects of irrigation works and improved methods of cultivation being assumed to increase the production of food for man and beast, what, in your opinion, would their more remote effects be? Would they in a population of great fecundity and exercising no restraint on such fecundity, tend to cause the people again to multiply up to the limit beyond which the soil could not further support them?

269. How would you propose to obviate this tendency of the growth of population to press close upon the amount of food available for its support?

270. In England we know that the same problem has been solved by emigration to lands in need of population. Could the same solution be applied to India?

271. In England, unrestrained fecundity is confined mainly to the lower and more ignorant classes. The educated classes, with certain exceptions, exercise control and foresight with regard to the number of children they bring into the world. Is education, within a measurable period of time, likely to pervade the millions of India to such an extent as to lead them to practise similar control and prevision?

272. Irrigation, we assume, increases the productiveness of the soil; it is also acknowledged to be concerned in the generation of malaria in many extensive tracts of the country. Malaria, we have proof, lessens the fecundity of the people. Do these facts suggest to you the involuntary establishment of an equilibrium between the population and the food production of irrigated tracts? Would such equilibrium, brought about in the way which these facts suggest, be a result to be desired?

AS TO THE ORDINARY FOOD OF THE PEOPLE.

273. In the tracts liable to famine in your ^{province} _{district}, which are the food-grains ordinarily used in their homes by well-to-do labourers and artisans? Please answer separately, if necessary, for town and country and for winter and summer.

274. How many meals do they eat in the day, and of what eatables and drinkables does each meal ordinarily consist?

275. If any of the ordinary food-grains happen to be unprocurable, what other grains do they sometimes substitute?

276. Of these occasional substitutes, which do the people consider most and which least palatable and digestible?

277. What do they say in objection to other grains which might probably be substituted, but which they practically never use?

278. What food-grains were used in poor-houses and kitchens, and at relief works under your observation during the recent famine?

279. How many meals a day did the people get in poor-houses and kitchens, and of what eatables and drinkables did each meal consist?

280. What sort of complaints were made as to the kind of food or plan of meals?

281. How does the diet given at famine relief poor houses and kitchens compare with the authorized scale of prison diet?

AS TO FOOD-STOCK AND PRICES.

282. Was the great rise in prices of the common food-grains, which occurred in September to November 1896, and was more or less maintained for the next twelve months, in your opinion a reasonable rise? That is to say, was it fairly proportionate to the failure of harvests, lowness of local stocks, and cost of replenishing them? If you think the rise was more than reasonable, to what do you attribute it?

282A. In market towns which came under your observation, was it possible to identify the persons who fixed the bazaar or current rates of food-grains declared from time to time? How far were these current rates strictly followed by the local retail traders?

283. Do you think that the depreciation of the rupee in relation to gold which has been going on has any effect in the direction of making prices of food-grains jump up quicker and higher than formerly when crop failures occur? Has there been a permanent rise in the average price of food-grains in India within the last twenty years? Has the rise been greater in respect of some kinds of grain than of others?

283A. What was the difference in prices prevailing in the distressed area under your observation, and in prices in neighbouring districts where the crops had not failed to such extent as to make relief necessary? Did the difference appear natural and reasonable in degree?

284. What material fluctuations of prices of grain occurred in the 12 months after 1st November 1896 in the distressed area under your observation? To what did they seem due, and was the trade sensitive? That is, did grain flow in quickly and freely in response to each rise of price from accessible markets where prices were lower? If not, state what in your opinion were the reasons or obstacles which impeded the activity of trade?

285. In the distressed districts under your observation, could the towns-people and villagers, who had money but no private stocks of their own, at all times buy their customary food-grains and condiments at the rates quoted in the nearest grain marts, or had they sometimes to pay much higher?

286. Were the people in receipt of relief in the shape of cash at works or in the village, always able to buy grain at the rates supposed to be current ?

287. Were food-grains of the common kinds exported from distressed tracts under your observation while the high prices prevailed ? If so, was this due to still higher prices elsewhere, or to want of capital for large purchases in distressed tracts or some other reason ?

288. Were fortunes made in the grain trade during the high prices ? If so, by what classes and by what sort of trade or speculation ? Was it genuine buying to put on the market, or of the nature of time bargain or speculation for a rise ?

289. Were the grain pits or godowns of the grain dealers for the most part opened and largely depleted at the close of the distress, or were many unopened and most but little depleted ?

290. In distressed tracts under your observation had any of the cultivators and land-owners what may be considered surplus private stocks of food-grain ? If so, did they generally sell such surplus or hold up all they had from panic or other reasons ?

291. While the high prices prevailed, did those cultivators, who had grain to sell to dealers, get prices as proportionately higher than usual as those the grain-dealers were selling at ?

292. Were the wholesale dealings between grain-dealers at prices as near to retail prices as they usually are ?

293. To what extent has the habit of storing food-grains in pits or other receptacles diminished among the grain dealers, landholders and cultivators of the tracts producing large crops of the common grains ? What are the reasons for such diminution ?

294. In such tracts have the railways and roads extended into them had the effect of stimulating the export of the annual surplus production to sea-ports, and to rich districts where more valuable crops are produced ? When crops fail and prices go up in such tracts, is private trade ready to import freely into them ?

295. To what extent were proprietors of land, State raiyats and under tenants among the classes which asked for and got relief ?

296. To what classes did the mass of persons relieved belong ?

297. To what was the inability of the distressed people to buy grain at the high prices principally due ? Did non-agricultural employment of labour fall off as much as agricultural employment ?

298. Did wages of any class of labourers, artisans, or servants go up in any degree in consequence of the rise of prices ? If not, why not ?

299. Has competition of foreign goods or of goods produced by Indian Mills seriously reduced the purchasing power of any class of artisans or labourers in the tracts under your observation ?

300. Can you compare recent with former famines, and say whether the different classes of people seemed this time to have more or less power of resisting destitution ?

301. Do you observe any change in their attitude of reluctance to go to poor-houses or to relief-works ?

302. Did they sell jewelry, brass pots, and cattle, as much as formerly ? Did fall in value of silver jewelry make them reluctant to sell it ?

303. What action, if any, was taken by officers of Government in the affected area under your observation to encourage importation of food-grains, or otherwise stimulate the activity of private trade ? What was the result for good or bad of such action ?

303A. What action was taken, if any, in any locality under your observation to supplement or stimulate activity of local grain-dealers in importing food-grain ? What was the result ?

304. Suppose that instead of relying entirely upon the action of private trade and the Indian market, the Government had resolved to import grain from abroad to a notified amount and for a strictly limited purpose, that is, for use at a large number of its poor-houses, kitchens, and relief works : suppose also that Government so imported either directly or through contractors, and adopted all possible pre-

cautions against obstructing the movements of private trade : what effect in your opinion would such action have had (1) on the cost of relief to the State ; (2) on the prices of food-grains in the bazars or open markets ; (3) on the activity of private trade ?

305. In the districts under your observation had you ever good reason to believe in the existence of local rings of grain-dealers formed to keep up prices of food-grains above the rates naturally resulting from the law of supply and demand ? If so, how far did such rings succeed in their purpose, and for how long ?

If you think such rings can be successfully formed at the present day in India, can you suggest any legitimate method of breaking them, which would in your opinion have the desired effect, and be on the whole distinctly advantageous ?

REGARDING THE GRAIN TRADE.*

306. How far and in what ways was the export by sea of the various food-grains affected by the famine and scarcity ?

307. How far and in what ways was the export by sea of other commodities affected ?

308. How far and in what ways was the import by sea—(1) of food-grains, (2) of other commodities affected ?

309. Is there any evidence that a permanent rise in the price of food-grains in India has taken place of late years ?

310. If such a rise has occurred, do you think that it is in any way connected with the fall in the Indian exchange ?

311. Is the export of food-grains from India in a series of years on such a scale as to materially affect the ability of the country to feed the population, or to materially reduce the reserve stocks held at a particular point of time in the country ?

312. In ordinary years is the import of food-grains by sea, for consumption in the port-town and for distribution into the interior, large ?

313. Is this trade in the hands of European or native firms ?

314. What grains are chiefly imported and from what foreign ports ?

315. When prices of food-grains rose rapidly at the end of 1896, were the stocks of rice and other food-grains large in the port ?

316. So far as the information went, were food stocks large in the interior of the country, or in any particular province ? What was the general impression as to the extent to which these stocks would prove sufficient for the food-requirements of the country without importation from abroad, and would be placed on the market, or held up ?

317. Did the high prices reached at the end of 1896 lead to much speculative dealings in grain ?

318. Were these high prices maintained ? Were they followed by an active import of grain from foreign ports ?

319. Did the price of rice in Burma and of wheat and maize in Europe and America rise in consequence of apprehension of diminished food exports from, or of an anticipated demand on account of, India ?

320. Were shipments of grain made from American or European ports to India ? If they were only on small scale, what was the cause ?

321. Was there a sufficient margin at the end of 1896 between the prices of wheat or maize in India and the prices of these grains in Europe and America to make import into India profitable ?

322. If such a margin existed, but grain was not imported, what were the obstacles in the way of the establishment of the trade ?

323. In ordinary years what quantity of rice does Burma export to India and other countries ? Please give figures showing the distribution.

324. From November 1896 to October 1897 what quantity of Burma rice was imported into this port ?

325. Were these imports mainly for despatch to the interior ?

326. Were the firms on whose account these Burma imports were made chiefly European or native firms ?

327. Were these imports made on the order of up-country grain-dealers for Burma rice, or by Calcutta firms at their

* NOTE.—These questions are intended for witnesses put forward by the Chambers of Commerce, and for Experts specially invited by the Commission to give evidence.

own risk in anticipation of the demand of up-country dealers?

328. Was any difficulty at first experienced in getting up-country grain-dealers to take Burma rice, and did stocks in consequence tend to accumulate and the price to fall in the port?

329. Was there always a profitable margin between rice prices in Burma and here to admit of continuous import here?

330. It has been stated that in the event of India requiring large imports of grain from America or Europe, European firms at the ports would find more difficulty in engaging in such import trade than in the case of the grain-export trade; that is to say, the reversal of the ordinary process of trade would be accompanied by special risks and difficulties. Is this so?

331. The largest export houses have, it is believed, many up-country agents in the interior who place contracts for purchase of grain for export with native grain-dealers. In the event of India requiring to import grain, could not contracts for sales of grain be placed with up-country dealers by the same agency?

332. Would the ordinary course of trade be for the European import houses to place the grain in the up-country markets? Would the European houses import at their own risk, or only in fulfilment of contracts with native firms?

333. Within how many days could 20,000 or 30,000 tons of wheat or maize be landed in India from Europe or America after a contract had been placed in this port?

334. In that interval prices in India might have so fallen as to prevent the importer from making the profit he had anticipated?

335. Is this contingency one of the causes which might prevent grain from being imported from distant countries to India, in spite of prices being so high for the time being in India as to hold out expectations of considerable profit?

336. Might there be a serious panic in the Indian grain markets, resulting in dealers refusing to sell or extremely high prices being asked, without its leading to imports from abroad being arranged for?

337. Do you think that the offer of a bounty on each ton imported, or the direct purchase by Government of grain for feeding the poor on relief works, would have eased the market? To what extent would any such measure have discouraged private trade?

338. What would have been the effect in the grain markets of foreign countries of intelligence that the Indian Government was purchasing, or encouraging the importation of grain? Was the want of activity in the grain import trade from America or Europe in any way due to the dearness of money in India in the winter of 1896-97, and to difficulty in obtaining accommodation? If so, could Government with advantage have stimulated import by loans or contracts?

339. The relief workers were paid a cash wage sufficient to enable them to buy a stated quantity of food, the wage varying week by week with the local grain-prices. If Indian food-prices throughout the famine were lower than the price at which grain could be laid down in India from Europe or America, might not importation by Government of food for some of the relief works have made those particular relief operations costlier than they have actually been?

340. Would this disadvantage have been compensated by a lowering of prices in India, owing to which other relief works would have been less costly, and the public would have been enabled to buy food at lower rates?

341. If we may suppose that prices would have fallen in consequence of the Government undertaking to import from abroad to feed the relief workers, would this have caused less rice from Burma to have been imported?

342. What reductions were made in railway rates on grain from the sea-board to the interior, and had such reductions an effect on trade?

343. Can you think of any possible combination of circumstances under which it would be advisable for the Indian Government to import foreign grain itself for its relief purposes, or to stimulate such import by the trade by loans, contracts, or bounties?

344. Was there ever a time during the recent famine when Government might, in your opinion, have tried such measures with advantage?

345. Can you conceive of any case in which prohibition of exports would in your opinion be of advantage?