

Publications of the Board of Economic Inquiry,
Punjab.

1. Economic Conditions of Simla Rickshaw Men. By L.R.Dawar. (No.37) 1934. X4122:9.23684 Gf pp. 1- 32.
2. Agricultural Statistics of the (British) Punjab, 1936-37, being the First Supplement to "Agricultural Statistics of the Punjab, 1901-2 to 1935-36. By Gulshan Rai. (Spplment 1 to Publication No.52.) 1938. pp. 33- 49. X9(0).23652 G8
3. Cost of Milk Production (1931-32 to 1934-35) at Lyallpur, Punjab. By Kartar Singh and Lal Chand Sikka. (No.55) 1938. pp. 50- 99. X9(2311:71):26.236 G8
4. Urban Working Class Cost of Living Index Numbers (1936) in the Punjab. By Ram Lal. (No.56) 1938. X:946(Y33).236 G7 pp.100-114. X9(2311:71):26.236 G8
5. Sales of Land in South-West Punjab, 1931-32 to 1933-34. By Cyril P.K.Fazal. (No.57) 1938. pp.115-144. 2 236, 35.N34 G8
6. Family Budgets, 1935-36, of Six Tenant-Cultivators in the Lyallpur District. By Iabh Singh and Ajaib Singh. (No.59) 1938. X9(J):16(Y2).23652 G8 pp.145-168.
7. Urban Working Class Cost of Living Index Numbers (1937) in the Punjab. By Ram Lal. (No.60) 1938. X:946(Y33).236 G8 pp.169-177.
8. Tanning Industry in the Punjab. By Roshan Lal Anand and Ram Lal. (No.61) 1939. pp.178-253. X9(MA7).236.N4 G9
9. Family Budgets, 1936-37, of Eleven Cultivators in the Punjab. By Iabh Singh and Ajaib Singh. pp.254-289.

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(No.62) 1939. pp.254-289.
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10. Relationship between Fertility
and Economic and Social
Status in the Punjab. By
S.P.Jain. (No.64) 1939. pp.290-312.
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**The Board of Economic Inquiry,
Punjab.**

12114

PUBLICATION No. 37.

(GENERAL EDITOR : J. W. THOMAS, B.Sc., B.Com.)

ECONOMIC CONDITIONS

OF

SIMLA RICKSHAW MEN.

INQUIRY

CONDUCTED BY

L. R. DAWAR, M.A.

[The Board does not hold itself responsible for any opinions expressed or
conclusions reached by the writers.]

1934.

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LAHORE:

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1934.

PREFACE.

This report presents the results of an inquiry undertaken in the summer of 1933 by the Punjab Board of Economic Inquiry. The inquiry was entrusted to an Investigator who had undertaken several previous inquiries of various types and he has produced an interesting and valuable report on a somewhat singular example of human endeavour to earn a livelihood. His task was far from easy, for the rickshaw men are apt to be credulous and suspicious ; and the winning of their confidence was a necessary preliminary to the collection of reliable information regarding their mode of life.

2. Owing to various difficulties discussed in the report, the information is not always as complete statistically as some would perhaps like ; the samples are small in certain cases, and on the medical side especially there are gaps which further investigations may fill in. But there is sufficient material to indicate the general economic condition of those with whom the inquiry deals, and to give a reasonably adequate picture of the conditions of their life and livelihood.

3. It is not the aim of the Board, in conducting these inquiries, to stimulate the social conscience or to point the way to action. Their object is to present facts and to leave the deductions to those whom they concern. The author of the report has accordingly exercised a great measure of restraint in preparing his account which the facts that came to his notice rendered difficult at times, and has in only a few instances suggested fairly obvious steps that might be taken to alleviate the lot of the rickshaw men. The writer of this preface, who is not connected with the Board, but supervised the inquiry on their behalf, cannot but express the hope that the report will serve to bring to the notice of the public in Simla and of their representatives in positions of authority, the urgent need for an amelioration of the conditions of licensed rickshaw men.

4. A question which the facts suggest is that of the regulation of the number of rickshaw men licensed. This number has shown a tendency to rise while custom has decreased ; and the writer of this preface believes that an appreciable reduction in the number would be a wise step. Such a reduction could be

effected without adding unduly to the number of journeys made by each man, or creating any shortage except perhaps on one or two days in the season : it would increase the average earnings substantially and would effect some immediate improvement in the living conditions, where improvement is particularly needed. If admission to the profession for new entrants was restricted and those who are physically least fit were excluded, the result should be a general increase in the well-being of the men as a whole. But care would be necessary to ensure that the "surplus value" of selection remained with the men selected.

5. The report will raise in the minds of some readers the more fundamental issue of the continuance of the system. Few thoughtful persons can have travelled in a rickshaw without a regret that no other suitable means of transport is available, and a certain disquietude at the idea of employing men on such work. This is frequently heightened by the contrast between the circumstances of the passenger and of those conveying him, possibly, to an evening's diversion or hospitality. The truism that the men would not come if they did not secure a financial benefit by so doing is not a complete answer to such doubts. But the circumstances of Simla place serious obstacles in the way of introducing any alternative system ; and it would seem therefore that the aim at present should be to ensure conditions which will meet to the fullest extent possible the needs of human personality.

6. Acknowledgments are due to all who contributed to the results here presented -- to the municipal and health authorities and their employees, to the owners of private rickshaws, the manufacturers and the *chaudhris*, and to those rickshaw men who submitted to what must have been at times a perplexing inquisition.

NEW DELHI,
21st February, 1934.

A. G. CLOW.

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APPENDIX
FORMS USED IN THE INQUIRY
Members of the Family.

FAMILY _____

Name.	Date of birth.	Relationship.	Work.	Remarks.

Daily Cash Account.

FAMILY _____

Date.	Particulars.	Quantity.	Income.	Expenditure.	Source or purpose.	Remarks.
			Rs. a. p.	Rs. a. p.		

Weekly Fuel Account.

FAMILY _____

Date.	Article.	Amount.	VALUE.			Remarks.
			Rs.	a.	p.	

Weekly Milk Record.

ANIMAL _____*

Date.	MILK.					GHI.			Monthly total of milk sold.	Remarks.
	Given to Calf.	Net Milked.	Sold.	Consumed.	Churned.	Made.	Sold.	Consumed.		

* Separate sheets should be used for buffaloes, cows, goats, etc.

Live Stock Account.

FAMILY _____

Name.	Age in the beginning of the year.	Value.	Date of purchase or beginning of useful period.	Date of disposal or end of useful period.	Remarks.

Inventory.

Dated _____

FAMILY _____

Particulars.	Quantity.	Rate.	VALUE.			Remarks.
			Rs.	a.	p.	
FOOD PRODUCTS:						
Wheat ..						
Maize ..						
Chi ..						
Sugar—						
Shakkar ..						
Gur ..						
Khand ..						
Rice ..						
Pulses—						
Mash ..						
Moth ..						
Mung ..						
Gram ..						
Masur ..						
Others ..						
Salt ..						
Others ..						
DRESS—						
Kapas ..						
Lint ..						
Yarn ..						
KEROSENE OIL ..						
ARTICLES OF FUEL						
OTHER ARTICLES—						
Cotton seed ..						
Oil cakes ..						
Mammni ..						

Cotton Account

FAMILY _____

Particulars.	KAPAS.		LINT.		YARN.		Remarks.
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
	Srs.	Rs.	Srs.	Rs.	Srs.	Rs.	
1. Surplus from last year							
2. Purchased or gifts received ..							
3. Produced ..							
<i>Total</i> ..							
4. Sold ..							
5. Given to kamins ..							
6. Used at home—							
(i) Bartered for cloth							
(ii) Ginned (kapas only) ..							
(iii) Used for quilts (lint only) ..							
(iv) Spun into yarn (lint only) ..							
(v) Turned into cloth (yarn only) in the village ..							
7. Surplus ..							
<i>Total</i> ..							

HOME-MADE CLOTH ACCOUNT.			CLOTH IN EXCHANGE FOR KAPAS, LINT OR YARN ACCOUNT.			QUILT ACCOUNT.		
Particulars.	Quantity.	Value.	Particulars.	Quantity.	Value.	Particulars.	Quantity.	Value.
		Rs.			Rs.			Rs.
1. Lint ..			1. Kapas ..			1. Cloth ..		
2. Carding charges—			2. Lint ..			2. Printing and dyeing—		
(i) Cash ..			3. Yarn ..			(i) Cash ..		
(ii) Kind ..			4. Cash ..			(ii) Kind ..		
3. Spinning charges—			5. Kind ..			3. Carding and stuffing—		
(i) Cash ..			6. Carding charges—			(i) Cash ..		
(ii) Kind ..			(i) Cash ..			(ii) Kind ..		
4. Charges of weaver—			(ii) Kind ..			4. Stitching—		
(i) Cash ..			7. Spinning charges—			(i) Cash ..		
(ii) Kind ..			(i) Cash ..			(ii) Kind ..		
Total ..			(ii) Kind ..			<i>Total</i> ..		
5. Length ..			<i>Total</i> ..			5. No. of quilts ..		
6. Cost per yard ..			8. Length ..			6. Cost per quilt ..		
			9. Cost per yard ..					

GLOSSARY

ANNA	.. One-sixteenth of a rupee. (Abbrev.=A.).
ARAIN	.. Mohammedan agricultural tribe noted for its industry and cultivation; often found as market-gardeners near cities.
BHUSA	.. Straw of wheat stalks broken and crushed into short lengths by bullocks treading on it at the time of threshing.
CHADDAR	.. Sheet of cloth ; shawl.
CHARPOY	.. Bedstead.
CHHATAK	.. Indian weight : one-sixteenth of a seer ; equal to 2.057 ozs. (Abbrev.=Chh.)
DAHI	.. Curd.
DOPATTA	.. Sheet of thin cloth used by women to cover the head.
DURRI	.. Carpet.
GHAGRA	.. Skirt of voluminous folds.
GHI	.. Clarified butter, commonly used in upper India instead of lard or other cooking fats.
GUR	.. Raw unrefined cane-sugar in lumps.
GURDWARA	.. Worshipping place of Sikhs.
'ID	.. Mohammendan feast-day.
JAT	.. One of the principal agricultural tribes in the Punjab, noted for its hard work, and ability to withstand adverse conditions of life.
KAMIN	.. Menial ; village servant.
KANAL	.. Measure of area ; in Lyallpur District equals one-eighth of an acre.
KAPAS	.. Raw unginned cotton.
KHAND	.. Crystallised sugar.
LASSI	.. Butter-milk.
MAMMNI	.. Refuse separated from wheat during the process of winnowing ; contains shrivelled and diseased grains of wheat, weed seeds and dust.
MARLA	.. Measure of area ; equals one-twentieth of a kanal.
MASH	.. Pulse, much valued as human food (<i>Phaseolus radiatus</i>).
MASSAR	.. Lentil (<i>Lens esculenta</i>).
MAULVI	.. Muslim man of learning ; a teacher.

MAUND	.. Indian standard weight of forty seers ; equal to $82 \frac{2}{7}$ lbs. (Abbrev.=Mds.).
MOTH	.. Small pulse (<i>Phaseolus aconitifolius</i>).
MUNG	.. Pulse, much valued as food for invalids (<i>Phaseolus mungo</i>).
PIE	.. One-twelfth of an anna (Abbrev.=P.).
PIRI	.. Low stool.
RUPEE	.. Indian standard coin, fixed at 1s. 6d. sterling in 1927.
SAG	.. Spinach ; greens ; pot-herb.
SARSON	.. Indian colza ; an oil seed (<i>Brassica campestris</i> var. <i>sarson</i>).
SEER	.. One-fortieth of a maund ; 32·9 ozs. (Abbrev.=Srs.)
SHAKKAR	.. Roughly ground raw cane-sugar.
SHILWAR	.. Baggy pyjamas worn in North India.
SIKH	.. The martial religious sect of the Punjab. At the 1931 census they numbered 4,071,624 or 14·3 per cent. of the Punjab population.
SQUARE	.. Division of land, in certain Canal Colonies (including Lyallpur) ; size, 1,100 feet by 1,100 feet ; equivalent to 27·8 acres.
SUTHAN	.. Women's trousers.
TEHMAT	.. Sheet of thick striped cloth worn around the legs like a sarong.

**The Board of Economic Inquiry,
Punjab.**

PUBLICATION NO. 64.

(GENERAL EDITOR : J. W. THOMAS, B.Sc., B. Com.)

**RELATIONSHIP BETWEEN
FERTILITY AND ECONOMIC
AND SOCIAL STATUS**

**IN THE
PUNJAB.**

**Being the results of an inquiry conducted in 275 villages in
25 districts of the Punjab and comprising
about 20,000 rural families.**

BY

S. P. JAIN, M. Sc.

**[The Board does not hold itself responsible for any opinions expressed
or conclusions reached by the writers.]**

1939

Some Reports of the Board of Economic Inquiry, Punjab.

FOOD REPORTS.

1. Rates of Food Consumption in the Attock District. (Publication No. 6.)
2. Rates of Food Consumption in the Multan District. (Publication No. 29.)
3. Sixty Years of Punjab Food Prices (1861-1920). (Publication No. 7.)
4. Eighty Years of Punjab Food Prices (1841-1920). (Publication No. 13.)

RURAL FAMILY BUDGETS.

1. Family Budgets, 1932-3, of Four Tenant-Cultivators. (Publication No. 40.)
2. Family Budgets, 1933-4, of Six Tenant-Cultivators. (Publication No. 44.)
3. Family Budgets, 1934-5, of Six Tenant-Cultivators. (Publication No. 50.)
4. Family Budgets, 1935-6, of Six Tenant-Cultivators. (Publication No. 59.)
5. Family Budgets, 1936-7, of Eleven Cultivators. (Publication No. 62.)

A complete list of the Board's Publications is given at the end of the book.

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PREFACE

There is widespread interest in the world population movements. Some very fascinating theories and beliefs have come to be recognised in this connection. A significant result of studies in the western countries is the view that human fertility decreases as man goes higher up in the social scale. Its importance will be admitted by all interested in human welfare. It then becomes necessary to inquire whether the observation is universally and absolutely true or whether the phenomenon is controlled by some factors which may be concomitants of certain special conditions. These conditions may or may not apply to all countries alike. It was because of the importance of the problem that the Board undertook the present study at the suggestion of Dr. R. A. Fisher.

The actual process adopted to conduct the inquiry is described in the report, and a summary of the main results immediately follows the Preface, but a few points require to be mentioned clearly so that the report may be considered in its proper perspective. The inquiry was extended over practically the whole of the Punjab—so wide a field that, owing to the limited resources of the Board, proper checks could not be exercised to verify the accuracy of the information collected. The information, moreover, was collected by village school teachers—honorary workers with little leisure—who had to deal with the villager, a person who does not generally feel easy when questioned about his income, womenfolk or other domestic affairs and whose notions about age are usually vague. It would require careful and tactful cross-questioning on the part of an investigator to get at real facts regarding children born and dead and their ages, and it is not very certain whether the school teachers came up to the requirements of the case. For example, the children were not recorded in their birth order with the result that discussions and analyses based on the birth order of children could not be taken up.

The method selected for study is based on the work on the subject by authorities like David Heron, Carr Saunders and Pearson. Western studies generally deal with characteristics pertaining to fertility and economic status as exhibited in definite local units, since this allows for more or less homogeneous conditions of environment. Similarly, here the data have been considered district-wise. It may be well to state that the question of celibacy which has some importance in the West is not of much significance in the Punjab in view of the universality of marriage.

The economic status of a couple has been measured by their gross annual income in the year of inquiry (1934-35) which was a fairly normal year. In the case of couples who were members of a joint family, the income was with a certain element of arbitrariness weighted by 20 per cent. (in view of some common interests between the couples of the family) and divided by the number of couples in the family to arrive at the economic status figure. The local conditions justify such a weightage.

The problem has been studied from the point of view of social as well as religious groups. The variations due to economic position within the same social groups have also been considered. The number of children born, and the number surviving, per 100 couples, which have been called respectively total and effective fertility, have been determined to study district characteristics.

In the presentation of the report, care has been taken to give the primary figures, while providing tables illustrative of the result. Although the necessity of checking the data by preliminary sifting and by rejecting unreliable work was constantly kept in view, it was not practicable to examine the data thoroughly from a research standpoint, and owing to various difficulties, statistical analysis could not be carried out in detail. In view, however, of the great interest and importance of the present inquiry, it has been considered proper to publish the report. The main merit of this study lies in the fact that it presents a new aspect of the problem, namely that the reduced fertility of socially higher classes is due not so much to economic as to cultural differences.

In the end, it is only fair to add that the Report owes much to Mr. S. P. Jain who was employed by the Board to scrutinise and collate the material from the point of view of the statistician. The inquiry being of a very novel character, the task was a difficult one and he discharged it to the satisfaction of the Board.

Lahore:
June 23, 1939.

L. C. JAIN,
Acting Secretary.

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SUMMARY

Section 1 formulates the problem and Section 2 deals with the collection of the data. Sections 3 and 4 give an account of the methods adopted with a view to studying the following characters :

- (i) Correlation between economic status and fertility. (Section 4-a.)
- (ii) The number of children born and dead per 100 couples in the eight social classes into which the data have been sifted. (Section 4-b.)
- (iii) The number of children born and dead per 100 couples in the four main religious groups of the Punjab, sub-divided into three main social classes. (Section 4-c.)

Section 5 contains the results of the study of item (i) above and shows that fertility increases slightly with the rise of economic status.

Section 6 enumerates the results of the study of item (ii). Here it is found that the total fertility *i.e.*, the number of children born per 100 couples of the agriculturist class is greater than that of the menial class, which in its turn shows a higher fertility than the non-agriculturist class. In point of effective fertility (*i.e.*, the number of children surviving per 100 couples), the order of the three main social classes is found to be—agriculturist, non-agriculturist and menial. In the three economic sub-divisions of the first two classes, the upper comes first, the middle next and the lower one last, both in point of total fertility as well as of effective fertility. The fertility of the menial class is found to be higher than that of the lower agriculturist or the non-agriculturist class. The total fertility as also the effective fertility of the professional class turns out to be comparatively low. However, the differences in total fertility of the various classes are smaller compared to those in effective fertility.

Section 7 deals with an interesting side-line. Here an attempt has been made to put the districts in the order of wealth of their rural areas.

Section 8 gives the results of the study of item (iii) above. The Christians almost invariably show the highest total as well as effective fertility. The Muslims have a higher fertility than the Hindus who are more prolific than the Sikhs. The survival rate among the Muslims and the Sikhs is higher than that among the Hindus. The same relative position as found in Section 6 is traceable in the three main social sub-divisions of the same religious group, excepting that the non-agriculturist class shows the highest total fertility among the Hindus. Among the agriculturists and the menials, the Muslims and the Sikhs have higher total and effective fertilities than the Hindus in the same social classes. Amongst the non-agriculturists the total fertility of the Hindu is slightly higher than that of the Sikh, but his effective fertility is smaller. Thus, class against class, the Muslims and the Sikhs have a higher effective fertility than the Hindus.

In Section 9 the implications of the above results are discussed and two interesting conclusions emerge. One is that the total and effective fertilities are affected by an interplay of social and economic factors. The menial class does show a higher fertility, but owing to poor economic position it does not find full expression. When the income position is lowered below a certain standard, the fertility is to some extent adversely affected. The other is that the more potent among the causes of the lowered fertility of socially superior classes observed in the West is the higher education and culture in those grades of society. This may perhaps be appreciated by those interested in rural reconstruction who aim at checking the growth of population in the Punjab in order to raise the general standard of living.

AN INQUIRY INTO THE RELATIONSHIP BETWEEN FERTILITY AND ECONOMIC AND SOCIAL STATUS

Section 1.—The Problem

Of late, considerable interest is being shown in the study of tendencies in population movements all the world over. Studies in the West have made a good case for the view that reproductive selection is at present working in the direction of national degeneracy. They seem to show that the reduction in the size of the families has begun at the wrong end of the social scale and is going on in the wrong way. That section of population which is better equipped and is more desirable from the point of the advancement of human society is showing a poorer reproductive rate as compared with the other section which shows undesirable social characters, although the latter section has a higher mortality of children. This has led to the conclusion that higher social status or economic position brings about reduction in fertility in man. It is of importance to see how far these reactions, which have disturbed the equanimity of the West, are operative under Indian conditions. Professor P. C. Mahalanobis, an eminent statistician, has in a recent note put concisely some aspects of the problem from the Indian point of view as follows:

“We do not know whether the size of the family increases, remains constant, or decreases with an increase in the income of the family. We do not know whether there is any differential fertility between different communities, or different occupational groups or different economic strata It is imperative that Government should take immediate action to enable a scientific study of population problems being made in their various aspects.”*

The main object of the present study is to investigate these very points. It may, however, be mentioned that this inquiry was taken up by the Board much before the above note was written.

The subject is clearly one of great importance in the problem of national welfare. Professor R. A. Fisher, while recommending the undertaking of such an inquiry by the Board, wrote that the problem “has certainly a considerable economic importance, for a rate of reproduction which favours the richer has an equalising influence on the distribution of wealth, while that which favours the poorer tends to enhance existing inequalities of distribution, and is in the West one of the major causes of discontent, and of such expedients as the attempt to relieve the poor at the expense of the rich by means of taxation.” The problem has another phase. It is now generally believed that physical and mental characters are inherited. What calls for discussion is only the manner or intensity of inheritance. In their English studies it has been shown by Pearson† and confirmed by Powys‡ that 25 per

*See “*Sankhya*,” Vol. 3, Part I, page 58. “The Need of a Sample Survey of the Growth of Population in India.”

†Reproductive Selection: The Chances of Death, Vol. I, page 80 et seq; 92.

‡On Fatality, Duration of Life and Reproductive Selection: *Biometrika*, Vol. IV, Part III, page 250.

cent. of the married population produce 50 per cent. of the next generation. In order to prevent the beginning and the spread of degeneration, it is necessary to determine the nature and conditions of the more fertile classes of the community as also to examine whether that 25 per cent. is the better or the worse portion of the community. In the words of Professor H. Lindborg, ". . . nations which early enough realise the importance of herited health and act upon this realisation will advance triumphantly, they attain to a higher morality, a more intelligent culture, a happier and healthier state of being."

There are alarmists' predictions that the actual growth of population in India will be large in the immediate future, and this prophecy is fraught with the usual economic consequences. In India, villages are the seed-beds of population. If it is desirable to control the growth of population, then attention has to be directed to the villages. The first step in the direction is to inquire into the forces which govern the size of the family in the villages.

Section 2.—The Inquiry

The inquiry was conducted in 275 villages in 25 districts of the Punjab.* Acknowledgment is made to the Director of Public Instruction, Punjab, who kindly placed the services of the village schoolmasters at the disposal of the Board for conducting the inquiry. The selection of villages for the purpose of the inquiry was, therefore, made from amongst such as had a school. Owing to practical difficulties in the way of instituting inquiries, big villages were left out of consideration. Such factors as the area, the population, and the important tribes of a district decided the number of villages to be selected from each district. As a first move, the District Inspectors of schools (who know the local conditions of their circles fairly well), were requested to put up a list of such villages in their respective circles as did not have a big population and as afforded facilities for conducting the desired inquiry. Of the three distinct social classes in a Punjab village—agriculturist, non-agriculturist and menial—the agriculturist largely predominates, and this fact was given due weight in the selection of villages. As a district is divided into tahsils, which are further subdivided into two or three revenue assessment circles on the basis of kinds of soils, it was decided to include at least one village from each assessment circle. The number of villages to be selected from each assessment circle was arrived at on the basis of the size and important classes inhabiting the circle. The required number from each circle was selected at random† from the list of villages proposed by the District Inspectors which was representative of the most important cultivating classes of the district. The number of villages in which the inquiry was instituted varied from 8 to 12 in each district. The population of the selected villages ranges from 400 to 1,800, but a great majority of them have a population between 800 and 1,200 with about 200 families each.

*Out of these, the district of Attock (11 villages) has been left out because of the defective returns of schedules and other difficulties. No investigation was held in the Kangra and the Simla Districts (Mountainous), Shahpur District (Canal Colonies) and Hissar District (Eastern).

†In a few cases, some villages were deliberately selected to ensure representation of a particular class. For instance, Clarkabad (Lahore) was included so as to have a Christian village.

The work of investigation was done by the teachers in their spare time. Where a village happened to be too big for one man, the work was divided between two teachers of the school, otherwise one teacher filled up all the schedules for the village. Some members of the Board's staff, duly trained for the inquiry, went to the villages to explain the questionnaire personally to the teachers concerned and to fill up a few schedules in their presence.

The schedules (which were in Urdu and an English translation of which is given at the end of the report), aimed at collecting information on the following points:

1. Names of members living in a family (defined by a common hearth and purse) and their relationship with the head of the family.
2. Religion, caste and occupation of the head of the family.
3. Age of a couple at marriage, muklawa,* and at the time of birth of the first issue.
4. Sex and age of children (at death, if dead).
5. Income of the family from agricultural and other sources; land owned and cultivated in the case of an agricultural family.
6. Seasonal produce in the year of inquiry (kharif 1934 and rabi 1935) in the case of an agricultural source of income. (The year was a fairly normal one.)
7. Some other miscellaneous information (which was, however, incompletely returned, e.g., extent of debt, cattle owned, cause of death of children, literacy, etc.).

Section 3.—Treatment of the Data

The number of children born alive per couple is usually taken as an index of fertility in man. This index is influenced by the ages of husband and wife at marriage and by the duration of marriage. A third factor considered in western studies, namely, frequency of celibacy, is of little significance in India where marriage is almost universal, as shown in the Indian Census Report of 1931.† In order to eliminate these influences, as far as practicable, the data were made more or less homogeneous with respect to these characters. This procedure is based on the paper "Genetic (Reproductive) Selection: Inheritance of Fertility in Man and of Fecundity in thoroughbred Racehorses," by Karl Pearson and others.‡

Accordingly, cases of very early and late marriages were excluded. Thus, cases where the wife at the time of marriage was under 12 years of age or the husband under 15 years of age were not considered. Similarly, cases where the wife at the time of marriage was over 20 years of age or the husband over 25 years of age were ignored. In a few districts (Mianwali, Jhelum, Gujranwala, Rawalpindi, Gujrat, Jhang, Ferozepore and Attock) it was found that the imposition of these limits would seriously curtail the number of cases to be considered, the obvious reason being that the age of the wife at marriage is usually higher in these areas. Hence in these districts, only those cases were rejected where the wife at the time of marriage was over 25 years

*Muklawa marks the time from which the wife begins to live with her husband.

†Vol. XVII (Punjab), Part I, page 172.

‡Transactions of Royal Society, Series A, Vol. cxcii, 1899, page 257.

of age or the husband over 30 years of age. These various age-limits at the time of marriage are generally considered to be suitable for the purpose in view.

To eliminate the effect of the duration of marriage, as far as practicable, the cases where the couple had led a married life for less than 10 years were left out. This 10 years' restriction is not entirely arbitrary. The following figures (relating to a sample inquiry) taken from the Indian Census Report,* are instructive in this connection.

Duration of Marriage and Fertility

Duration of marriage with present wife.	Number of families.	Number of children born.	Average number of children born per 100 families.
Under 10 years ..	43,215	80,993	187
10 years ..	10,452	29,721	284
Between 10—19 ..	53,657	217,608	405
„ 20—31 ..	44,434	233,602	525
32 years and over ..	21,644	124,869	577

The period of marriage "has been reckoned from the date on which the wife shifted to her husband's home" and "family" is taken in the sense of a couple. This shows that the inclusion of marriages with a duration less than 10 years would seriously affect the fertility results as deduced by considering the number of children born per couple. The most common duration of marriage met with is that from 10 to 19 years. Thus, by basing conclusions on cases where the marriage had lasted for 10 years at least, whatever be its actual duration, no serious error is introduced.

Thus, the aim throughout this study being to consider fertility, children of only such couples have been taken note of as had led a married life for at least 10 years and where the wife at the time of marriage was under 20 years but over 12 years of age and the husband under 25 years but over 15 years; only in a few districts was the upper limit raised, as already stated.

In working out figures for income, a peculiar difficulty was felt. Most of the cases considered belonged to the agriculturist class, where a statement of the seasonal produce of the year (after deducting the customary charges of the menials) was obtained. It was only in a few cases that it was possible to get the figures of prices which the produce had fetched. However, the difficulty of evaluating the income in cases where only seasonal produce was available and not the price it had fetched, was reduced by the fact that the cultivation in the villages is very simple and confined to staple articles and a few cereals. A statement of the village market prices prevalent at the time when the agriculturists sold their produce was also returned by the village investigator. A flat rate of prices for a district was fixed by considering the statements of prices returned for the various villages in the district together with the "Fortnightly Report of Market Prices" for the Punjab districts (issued by the Director of Land Records, Punjab); Milne's "Field and Garden Crops of the Punjab" proved useful in supplying certain necessary information regarding agricultural produce.

*Ibid., page 184.

Section 4 (a).—Classification according to Economic Status

In Section 5, the association between fertility and the economic status of a couple has been studied. As is the case with all social inquiries of the type, the comparisons have to be indirect. The economic status has been measured by the gross annual income. It is believed that this gives a fair index of the economic status of a couple, specially under conditions obtaining in an Indian village. The income figures from their very nature could not be exact and hence they have been grouped in class intervals of Rs. 100 beginning with the class 0—100.

Under the Indian joint-family system of a common purse, there arises the difficulty of assigning income to couples who belong to a joint family. Unlike social status, the economic status of a couple is not determined only by the income or status of the family but is also dependent upon the number of couples in the family. Hence, in cases where there were more than one married couples in the family, the income of the family has been weighted by 20 per cent. and then divided into the number of couples in the family in order to determine the income to be assigned to each couple. This weightage has been applied in view of some common heads of expenditure, like food, other domestic expenses, field implements, etc.

In order to place the fertility figures on a comparable basis, and to further minimise fluctuations due to different durations of marriage, two alternative methods have been adopted. The first is to correlate the economic status with the total number of children born to a couple, considering only those couples which had been in a married state for 20 years at least. The Census table shows that there is not any rapid increase in the average number of children born per couple married over 20 years. Dr. K. C. K. E. Raja of the All-India Institute of Hygiene and Public Health asserts that a woman makes about 80 to 85 per cent. of the total contribution before she reaches 35 years of age. This roughly works out to 20 years' duration of marriage. The actual figures of the data themselves show that a very great part of the total contribution of children is made within 20 years of marriage. Thus this correlation will show whether people with larger incomes have correspondingly greater or smaller number of children, and hence will establish whether fertility is independent of or increases or decreases with economic status. The difficulty in this method is that the number of cases that can be taken is considerably reduced.

In the second method, the index of fertility has been taken to be the number of children born within the first 20 years after muklawa. Here, of course, all cases where the couples had been in a married state for 10 years at least have been considered, so that a greater number of cases as compared with those that could be taken in the first method, have been included. In case a couple had been in a married state for a period lying between 10 and 20 years, the actual number of children has been weighted proportionately, in order to arrive at the number the couple is assumed to have in the 20-year period. For instance a couple, which has lived together for 15 years and has 4 children, is assumed to have $4 \times \frac{20}{15}$ i.e., 5 children, the lower whole number in a fractional value being always taken. Since the method assumes that a great proportion of the total number of children born to a couple is contributed within the first 20 years, all those cases where couples got a greater number of children after the 20-year period have been rejected. The correlation has been

studied between economic status and this new index of fertility. The results obtained by the two methods have been placed side by side for the sake of comparison.

The frequency distributions obtained by either of the methods are fairly symmetrical with regard to the number of children, but, as could be anticipated, are highly skew with regard to income. There are many more cases of lower income as compared with those of higher income. Consequently, the coefficient of contingency has also been worked out in each case. Based as it is on deviations from independence values, it gives a more reliable measure of association in such cases than the coefficient of correlation. For this purpose, income has been considered in four groups, namely those between Rs. 0—100, Rs. 100—200, Rs. 200—300, and Rs. 300 and over, and the number of children in these groups as between 0—3, 4—6, 7—9, 10 and over. Thus, a fourfold contingency table has been obtained in each case. The classification has not been made finer, because of the prohibitive labour, as well as because of the fact that in such a case this coefficient is affected largely by casual irregularities of no physical significance in the class frequencies.

Section 4 (b).—Classification according to Social Status

In Section 6 the relation between social status and fertility has been studied. There are three main social classes in a Punjab village, the agriculturist, the non-agriculturist and the menial. (The classification is with regard to the status of the husband.) It is true that a hard-and-fast distinction may not be possible in all cases; there are bound to be border-line cases which can only be classified on individual merits. However, the general principles that have been observed in the classification are that an agriculturist is one who either owns land above 10 acres or whose income is entirely or at least predominantly from agricultural sources; the others have been considered to be non-agriculturists excepting when they could be placed in the menial class. The non-agriculturist class is mainly composed of shopkeepers, money-lenders and of those following other vocations. A menial (the vernacular equivalent being Kamin) has been taken to be one whose labour is customarily paid for in kind and not in cash, and on whose services the villagers generally have a claim. Owing to the impact of conditions in urban areas, sometimes, though not frequently, labour such as that of a carpenter or of a blacksmith, which is generally taken to be of a menial nature, is paid in cash in rural areas as well. In such cases, of course, occupation has been the main guide, but couples whose income from the occupation went above Rs. 200 per annum have been placed in the non-agriculturist group. In view of the structure of society in the rural areas of the Punjab, artisans, who are generally known by the name of Sepi, have, as a rule, come under the menial class.

Agriculturist and non-agriculturist classes have been further subdivided into Upper, Middle and Lower, according to their economic position. These sub-divisions may not correspond to different classes with distinct social status in the village society, but they do have a distinct importance from the point of view of this inquiry. An affluent agriculturist is care-free as compared with a poor agriculturist. It is worth while to see if there is any difference in their fertility. Another class, among the non-agriculturists, which, besides having a distinct social standing, is specially interesting for the purposes of this inquiry,

is what may be called for want of a more expressive term, the "professional" class of the village. The class includes school teachers, priests, patwaris and other officials of the type. This class has had some education and is generally more refined than the others, the vocation of the class being of a "gentleman's work" character. Thus, the following eight social classes have formed:

- I. Upper Agriculturist—either land owned 20 acres or above, or income Rs. 400 per annum or over.
- II. Middle Agriculturist—land owned between 10—20 acres or income Rs. 200—400 per annum.
- III. Lower Agriculturist—income below Rs. 200 per annum.
- IV. Upper Non-agriculturist—income Rs. 400 per annum or over.
- V. Middle Non-agriculturist—income Rs. 200—400 per annum.
- VI. Lower Non-agriculturist—income below Rs. 200 per annum.
- VII. Professional—mainly composed of school teachers, religious priests and patwaris.
- VIII. Menial—carpenter, barber, blacksmith, etc.

For Classes I and II an ownership of land above 10 acres has been taken to be a conclusive test, otherwise the main source of income has been the criterion for allocating cases to agriculturist or non-agriculturist classes. The total income of the family has been considered in placing a particular case in the upper, middle or lower sub-division. The social class of a couple has been taken to be the same as that of the family to which it belongs, except when it could be placed in the "professional" class. It sometimes happens that other members of a family follow agricultural pursuits while one member is a school teacher. In such a case the particular couple formed by that member has been placed in the "professional" class, while the others have been placed in the group to which the status of the family entitles them.

It will be seen that although the criterion of classification is primarily one of social status, these social grades are also distinguished by economic and occupational differences. This classification of social groups may be considered to be parallel to that devised by the Registrar-General of England for separating occupied males into "different social grades."

There may be differences of opinion about the order in which these classes should be placed in the social scale, but one descending order which may appeal to reason is the arrangement:

Classes I, II, IV, VII, V, III, VI, VIII.

The number of children born and the number of children dead per 100 couples of each class have been obtained for each district, and thus the fertility of different classes has been compared. Professor Carr Saunders in his paper, on "Differential Fertility" has considered the number of children born per 100 families, children dead per 1,000 born and children surviving per 100 families. The last he calls "effective fertility." His data have been drawn from the Census of England and Wales (1911). He took all cases where wives were below forty-five years of age at Census irrespective of duration of marriage. He points

out that a relevant factor in discussing the contribution of each class to the next generation is the amount of marriage within each class. For this he took the proportion of married men aged forty-five to fifty-five per 1,000 occupied males of the same age in each class, as an index of frequency of marriage. Unfortunately no figures, which can be taken as measures of frequency of marriage within each class, are available in the case of the rural Punjab. Differences in this respect may exist between the various groups of society in the rural areas. The conditions in the rural and the urban tracts are different, and any discussion on these lines will, therefore, have to be based mainly on impressions. However, as Carr Saunders states, differences in birth rate are more important than differences in amount of marriage so far as contributions to the next generation are concerned.

Section 4 (c).—Classification according to Religion

In Section 8, the data have been reclassified according to four main religions in the Punjab, namely, Hindus, Muslims, Sikhs and Christians. Each religious group has been sub-divided into three classes: (i) Agriculturist, (ii) Non-Agriculturist, and (iii) Menial.

Throughout this study a character which is exhibited by a great majority of the districts has been taken into consideration in formulating results. The number of children born and the number dead per 100 couples in each group have been calculated for each district to study the variations of fertility and of effective fertility with religion.

Section 5.—Fertility and Economic Status

Table 1 contains the various statistical characteristics of the frequency distributions marked "A" and "B," "A" being obtained by considering the income and the number of children born within the first twenty years of marriage, and "B" by taking the income and the total number of children born of couples with at least 20 years' duration of marriage. The various characteristics have not been given with their standard error, owing to the fact that the income distribution is skew. The more familiar expressions for standard errors do not have any reliable significance in the case of skew distributions, and the less known complex expressions applicable to the cases require such elaborate calculations that the labour involved is not commensurate with the results.

It will be seen that the range of variation of income is high. The corresponding average incomes obtained in "A" and "B" are not very different; as a matter of fact, comparatively high values in one correspond to similar values in the other. The values of average number of children in "B" are, generally speaking, higher than of those in "A," which can be explained by the fact that in "B" the duration of marriage is greater than that in "A." In these two types of distributions values of r (coefficient of correlation) as well as those of c (coefficient of contingency) do not differ materially, generally those districts which have comparatively higher values in one have similar values in the other type. The values of r (put down correct to two places of decimals) do not show any appreciable correlation effect. Barring four values which are practically zero, r is nowhere negative. On the whole, values of c tell the same tale, but they indicate slightly greater association than is shown by the values of r .

It may be remarked that c cannot be greater than .866 in the case of a four-contingency table. In order that a layman may appreciate the meanings of correlation coefficients, Dr. David Heron gives the

following rough description: "Unity marks a complete casual relationship, correlation between .00 and .25 may be spoken of as small, although such relationships may be quite sensible; correlations between .25 and .50 are moderate; when between .5 and .75 we may speak of them as large, and if between .75 and 1 as very large." Similar limits may be enunciated for the contingency coefficient of a fourfold type. Values of c between .0 and .2 may be taken to indicate small though possibly sensible association, those between .2 and .4 as moderate, between .4 and .6 as large, and between .6 and .866 as very large. Thus c shows that there is a small association, whether it is positive or negative values of c we cannot say. However, the fact that r is almost always positive and in view of the other evidence which is put forward in the subsequent sections, it may be said that fertility, as measured by the number of children, is increased slightly with an increase in the economic status as measured by income in the rural areas of the Punjab. It may be repeated that the association is only small and not even moderate. This result will be discussed in Section 9, where all the results have been collected.

Section 6.—Fertility and Social Status

Table 2 gives the primary figures of the section. It will be observed that in each district the agriculturist group (Classes I, II and III) predominates, and the menial class (VIII) comes next. The non-agriculturist group (Classes IV, V, VI and VII) is small. A good number of cases is obtained in Classes I, II, III and VIII, while the number in Classes IV, V, VI and VII is often too small to lead to any reliable conclusions district-wise. The advantage in making comparisons district-wise, however, is that the data is more or less equally affected by the general, geographical and other physical environment. Instances coming under Classes III and VII are particularly few. All this could be expected from the structure of society in the rural Punjab, where the non-agriculturist class is considered to be superimposed, as it were.

In Table 3 the number of children born and surviving per 100 couples in the three main social groups—agriculturist, non-agriculturist and menial—are given for each district. It will be seen that in a great majority of the districts the agriculturist and the menial classes have a greater number of children born than has the non-agriculturist. The difference in the fertility of the menial and the agriculturist is not so marked. The differences are, however, appreciable when the effective fertility (children surviving per 100 couples) is considered. The order is agriculturist, non-agriculturist and menial. The same state of affairs is indicated by the average figures for all the districts taken together. The fertility percentages for the agriculturist, the non-agriculturist and the menial turn out to be 507, 499 and 501 respectively while the corresponding effective fertility percentages are 348, 330 and 318. The remarkable fact is the smallness of differences in fertility. These differences are, however, accentuated in effective fertility, apparently due to a higher death ratio in the case of menials and a comparatively better survival rate in that of the agriculturists. The menial class is characterised by small incomes, bad and unhealthy environment and comparatively unhygienic habits.

Table 4 gives the number of children born and surviving per 100 couples in each of the eight social classes. As has already been remarked, the number of cases examined in some classes comes out to be too few. In order that some instances may be got in each class

without including very small samples, figures for those classes where the number of cases fell below 50 have not been entered in the table. Still the number of cases in Classes V and VI generally and IV and VII in particular are so small that they are liable to be affected by chance irregularities. Hence the results should not be interpreted very rigidly, only broad comparisons can be made.

It may be difficult to comprehend the facts indicated by such a big table. Accordingly in Table 5 the social classes in each district have been placed in the descending order as revealed by considering (i) the number of children born per 100 couples, and (ii) the number of children surviving per 100 couples. A strict mathematical order of figures has been observed in placing the classes in order, although such a procedure may not have actually any real significance in cases where the two figures are fairly close.

The table clearly brings out the high fertility and effective fertility of the upper class agriculturist. Considering the fertility first, the leading position is generally occupied by Class I, sometimes by Class IV and occasionally by Class VIII. Class VIII occurs quite early in each district, showing that the fertility of the menials is fairly high, although it may not be as high as that of the upper class agriculturist. The Classes which come generally at the end are either III, VI, or VII. Classes III and VI are marked by low economic conditions and Class VII is what might be called the educated class of a village. It occurs fairly towards the end in many of the districts where the class itself is entered. This fact of lowered fertility of Class VII will be considered in the general discussion of the results. Similarly, the comparatively poor fertility of Classes III and VI will also be noticed. The order according to fertility of the three economic divisions of the agriculturist class is—upper, middle and lower, with the middle and lower sometimes changing places. Similarly, in the non-agriculturist group, the order is Classes IV, V and VI. The fertility of the upper class non-agriculturist is often comparable with that of the upper class agriculturist. These facts serve to show that fertility is slightly reduced with the lowering of economic status.

Taking up the question of effective fertility, one important change is noticeable and that in the position of Class VIII. In cases where this class is fairly high up according to fertility, it is low in the effective fertility chart. This points to the fact that a greater proportion of children die in the menial group. Otherwise, the same general conclusions as in the case of fertility hold good in the case of effective fertility also. The effective fertility of Class VIII is generally higher than that of Class VI.

The same position is reflected in the figures for all the districts. The low total and effective fertility of Classes III, VI and VIII may be particularly noticed. The lowering in effective fertility of Class VIII, due to a higher death rate, is shown by these figures.

To summarise the results of the section, it may be said that the fertility of the upper classes (socially or economically) is higher than that of the lower classes, and the difference is accentuated when effective fertility is considered. The low effective fertility of the menial class is due more to higher death rate of children born than to fertility. Taking different economic classes in the agriculturist or the non-agriculturist group, it seems that fertility as well as effective fertility

is slightly lowered with the lowering of economic status—the decrease is more evident when the difference in the economic status is increased. The low total and effective fertilities of the “professional” class exhibited by these figures, few as they are, are worth noticing.

Section 7.—Districts grouped according to Wealth

In the rural Punjab, the agriculturist predominates. It is, therefore, believed that the number of upper class agriculturists per 1,000 cases examined would give a fair measure of the wealth of rural areas of each district. It may be worth repeating that an upper class agriculturist has been defined as one who either has an annual income of Rs. 400 or over or owns at least 20 acres of land. Reliable income figures are very difficult to obtain, hence it would not be wise to measure wealth by the value of average income that has been obtained in Section 5 for each district, more so because the incomes have been grouped in class intervals of Rs. 100 and the concentration is greater towards lowest incomes. Of the suggested measures, land is a stable factor in determining wealth. Generally the two tests of land or income have been found to be mutually corroborative. Professor M. Boldrini (Italy) took income by profession, for example, the liberal professions, as an index of the wealth of a district and graded the districts according to this index. A similar idea is traceable in the suggested index. The descending order in which the districts can thus be placed is as follows:

Upper class agricul- turists per 1,000 cases examined	Upper class agricul- turists per 1,000 cases examined
1. Ferozepore 319	13. Amritsar 171
2. Lyallpur 264	14. Sheikhpura 167
3. Jullundur 252	15. Gurdaspur 151
4. Montgomery 249	16. Gujranwala 150
5. Mianwali 238	17. Rawalpindi 150
6. Multan 210	18. Gujrat 146
7. Karnal 207	19. Ludhiana 126
8. Rohtak 206	20. Gurgaon 121
9. Ambala 205	21. Hoshiarpur 113
10. Dera Ghazi Khan .. 193	22. Jhang 110
11. Jhelum 192	23. Muzaffargarh .. 100
12. Lahore 178	24. Sialkot 68

The following note in this connection has very kindly been written by Rev. E.D. Lucas, M.A., D.D., Ph.D., to whom warm thanks are due for his constant interest in the inquiry:

Note by Dr. E. D. Lucas

I have been asked to write a note on the results obtained by our Statistician, Mr. S. P. Jain, in arranging certain Districts of the Punjab in the order of frequency in which upper class agriculturists are found per thousand cases examined. Upper class agriculturist means a landowner who has an income of Rs. 400 or more per annum or owns 20 or more acres of land.

Nothing more can be claimed for this attempt than that it is broadly indicative of the relative economic state of the peasantry in each district dealt with.

Four districts stand at the top of the list whether income alone is taken to classify agriculturists in groups of descending economic status or income and/or ownership of 20 or more acres of land. These four are Ferozepore, Lyallpur, Jullundur and Montgomery. This is more or less what one would expect from a knowledge of agricultural conditions prevailing in the rural Punjab. Ferozepore is a very large district, comparatively recently opened up by communications and canals, with large land holdings and cultivated by Sikh Jats predominantly, who are reckoned amongst the best cultivators in India. Lyallpur and Montgomery are the most fertile and best canal served districts with fairly large and consolidated holdings and growing a high proportion of commercial crops and well served by markets, communications and agricultural propaganda by the provincial Agricultural Department.

Jullundur is a densely settled district with more well-cultivation than any other and famous for its hard-working Arain farmers and their market gardening type of cultivation. It is a very fertile district where the co-operative movement has made most headway.

Mianwali is high up in this list probably largely because of the size of its holdings. It is doubtful whether it would be so high if income alone were considered. But most cultivation in Mianwali is well or river flood land cultivation which probably gives good yields. There are many large flocks of sheep and herds of camel reared because of large areas of waste to supplement cultivation. Multan and Rohtak which stand sixth and eighth on the list are newly opened canal areas with much virgin soil. Multan has many large holdings and the Hindu "Kirars" (Aroras)* have shown unusual ability in improving their holdings. Rohtak is the home of the Hindu Jat who is perhaps the most industrious of all the Jat class.

It is a little surprising to find Karnal ranking seventh though the area of canal irrigation has been expanding and the district is not densely settled, there being much waste land. Seasons differ much here owing to the amount of rainfall received and good seasons (as 1934-35 was) probably put the district higher up than an average over several seasons would do.

Ambala is probably brought higher than it deserves to be, because of the great fertility of villages nearer the mountains and the existence of good markets.

Dera Ghazi Khan is tenth probably solely because of large holdings.

Jhelum is a district where villages would differ greatly in wealth, according as they are in bottom lands or valleys or in uplands where they would be very poor.

It is surprising to find Lahore, Amritsar and Sheikhpura occupying the twelfth, thirteenth and fourteenth positions. Lahore and Amritsar are dominated by the two big cities in each. Amritsar is densely populated and there has been some water-logging and much malaria. Lahore is not a very fertile district except in certain restricted areas and the most enterprising of the village population is drawn off to the cities.

Sheikhpura has been badly water-logged and is poorly served by communications and is a new district. The submontane districts of

*Money-lending and trading caste.

Gurdaspur, Hoshiarpur and Sialkot stand fifteenth, twenty-first and twenty-fourth (the bottom place) in the list. Hoshiarpur has a central spine of foothills (Siwaliks) running down its entire length which has been denuded of woods and from which destructive hill torrents issue. It also is poorly served by markets and communications. Sialkot is very densely populated and is more largely industrial than most other districts. There is considerable water-logging in parts and a scarcity of subsoil water in others. The cultivators are predominantly Muslim Jats and Rajputs who are not noted for enterprise.

It is surprising to find the very fertile Gurdaspur district at the fifteenth position, but holdings are small and population dense and increasing rapidly. There is much malaria and hookworm.

Not much need be said about the place occupied by other districts. Gujranwala (16th place), Rawalpindi (17th), Gujrat (18th), Ludhiana (19th), Gurgaon (20th), Jhang (22nd) and Muzaffargarh (23rd) might all be expected to be in the lower positions, as all of them suffer from serious handicaps of one kind or another. Gujranwala is not secured widely by canals or wells, though the former have been spreading out more widely over the district. Rawalpindi is a very rugged district with small holdings. Gujrat, Ludhiana and Gurgaon are not widely secured by either wells or canals and Gurgaon has a most uncertain rainfall as well. Jhang and Muzaffargarh are at the outskirts of the province, poorly served by markets and communications and dominated by rapacious landlords with a feckless cultivating class beneath them. So that to one knowing something about general economic conditions in the province there is nothing in the arrangement of the districts in this table to awaken distrust.

Section 8.—Fertility and Religion

The primary figures of the section are in Table 6. Before considering the results in this section, it would be well to recapitulate a few facts about the distribution of the various religious groups in the districts, to which the figures of the inquiry relate. A glance at the table on page 317 of the Indian Census Report, 1931, Vol. XVII (Punjab), Part I, would show that most of the districts are predominantly Muslim. Even allowing for the fact that depressed classes have not been considered separately as in the Census, it appears that Rohtak is the only district which can be called predominantly Hindu. In Gurgaon and Karnal the Hindus are in a considerable majority over the Muslims, while in Ambala and Hoshiarpur the two are more or less equal in strength. In Sheikhpura, Gujrat, Jhelum, Rawalpindi, Attock, Muzaffargarh and Dera Ghazi Khan the Hindus are in an ineffective minority. In Gujranwala, Mianwali, Montgomery, Lyallpur, Jhang, Multan, the strength of the Hindus compares slightly better with that of the Muslims than it does in the districts mentioned in the preceding sentence, but still the proportion of the Hindus is poor. In the remaining districts the Muslims are in a good majority. Coupled with these remarks is the fact that the Hindus are more concentrated in the urban areas. These facts are reflected in the figures obtained in the section. Thus in many instances the number of Hindu cases in a district is small as compared with the corresponding number of Muslim cases in the district.

Again, the Census shows that the Sikhs form an insignificant part of the population in Mianwali, Muzaffargarh, Dera Ghazi Khan, Rohtak

and Gurgaon, which accounts for the fact that practically no Sikh case was obtained in these districts. In Karnal, Multan, Jhang and Attock, the proportion is so low that not even 50 cases could be got. In other districts the number of Sikhs is at least comparable with the corresponding Hindu population. In Ludhiana the Sikhs form the majority community. Ferozepore, Amritsar, Jullundur, Ambala, Sheikhpura, Lahore, Montgomery and Lyallpur are the districts where the Sikhs form an effective group and are in a strength superior to that of the Hindus. In these districts the difference between the number of the Hindus and the Sikhs is not great. Villages in the Punjab are characterised by the fact that each is generally inhabited dominantly by a particular religious group. Thus the inclusion or exclusion of a particular village is an important matter from the point of view of securing representation of the various religious groups. This is why the actual relative position of the Hindus and the Sikhs in the districts just mentioned is not accurately reflected in the figures obtained.

The Christians are few, and their proportion in the rural population is smaller still. The Census shows that it is only in Lahore, Amritsar, Gurdaspur, Sialkot, Gujranwala, Sheikhpura, Montgomery and Lyallpur that they are in a number worth taking note of. As it is, very few Christian cases were obtained in Montgomery and they have not been entered accordingly. The number of Christian cases actually obtained is much too small to give any reliable results. Reliable information about Christians can be gathered only when an inquiry is held in Christian families specially; in random sampling they are not likely to find much representation. Taken on the whole, the figures obtained in the section bring out the differential position of the main religious groups in the various districts.

Table 7 gives the total and effective fertility of the four religious groups. As before, classes where the number of cases turns out to be less than 50 have been ignored. It will be seen from the table that in a great majority of the districts the Muslims get more children per 100 couples than the Hindus do, who in turn have more children than the Sikhs. This conforms to the general belief that the Muslims are more prolific. The difference between the fertility of the Sikhs and the Hindus is not much, while the difference between the fertility of the Muslims and the Hindus is considerable. If the difference between the number of children per 100 couples for the Hindus and the Muslims is considered with the list of the districts in order of their wealth obtained in Section 7, an interesting fact is brought to light. Broadly speaking, those districts which are higher up in the list show a greater difference in the fertility of the two groups than those down in the list. The explanation may probably lie in the fact that where the conditions of living are easier, the difference in fertility is brought out more sharply; on the contrary, where the struggle for existence is stiffer, the differences are rounded off.

The number of children dead per 1,000 born also shows variation with each religious group. A greater proportion of children dies among the Muslims than among the Hindus. Among the Sikhs the death rate of children is distinctly lower than among the Hindus, and much lower than among the Muslims. The variation in this respect between the Hindu and the Muslim groups is, however, not big enough to turn the balance of effective fertility in favour of the Hindus.

Figures for a majority of the districts show that Muslims have a greater number of children surviving per 100 couples than the Hindus, although sometimes the difference is not much. The Sikhs, owing to a smaller number of children dying per 1,000 children born to them, show a better effective fertility than the Hindus. The survival rate seems to be almost equal for the Sikhs and the Muslims, but the figures by themselves do not show any particular tendency. In the Census reports it is often repeated that the number of the Hindus is going down in the Punjab. Among the perhaps more potent causes may be this factor of lower effective fertility.

From the figures, for all they can show concerning the Christians, it seems that their fertility is high, or, at any rate, not lower than of the Hindus or the Sikhs. The number of children dead per 1,000 born is comparatively low, so that the effective fertility compares well with that of the religious groups showing high fertility. These conclusions are borne out by the high birth and survival figures and the low death figures for "all the districts" taken together. Similarly, figures for the other religions, however, point to a slightly different conclusion to what has been reached by considering figures for each district. Although the birth figures for the Sikhs turn out to be less than those for the Muslims, they are higher than those for the Hindus—and this is contrary to our main conclusion. The explanation may be that in those districts where Sikh cases were available for comparison, the birth figures for the Hindus, as mentioned, are slightly higher, but owing to poor fertility of the Hindus in other districts, the average for all the districts is brought down. The death figure for the Sikhs is the lowest and the survival figure is highest. Again the birth figure for the Muslims is considerably higher, but the death figure, contrary to the earlier conclusion, is higher for the Hindus. Thus the survival figure for the Hindus is lower for a double reason. The explanation again may be found in the poor representation of the Hindus in certain districts, but this is not so obvious here.

These conclusions may be compared with those arrived at in a special inquiry conducted for the purpose along with the Census of 1931. The following relevant figures have been adapted from the table on page 179 in the Census report. (Figures in brackets are the corresponding ones obtained in this inquiry.)

Children Born and Surviving per 100 Families

	Children born per 100 families	Children dying per 1,000 born	Children surviving per 100 families
Hindus ..	409 (484)	283 (345)	206 (317)
Muslims ..	378 (512)	277 (338)	273 (339)
Sikhs ..	411 (498)	285 (301)	295 (348)
Christians ..	431 (553)	279 (296)	311 (393)

The two sets of figures are not exactly comparable, as the Census Inquiry takes Ad Dharmis* and Jains separately, while in this inquiry they have been taken with the Hindus.

It may be observed that the differences in absolute magnitude of the figures obtained in the Census and the present inquiry need not be stressed. In the Census Inquiry the figures were arrived at, irrespective of marriage and age of the couples at marriage. That these factors seriously bring down the average number of children born and surviving per 100 families is clear from what has been said in Section 3 in connection with the table taken from the Census report. When one thinks of the normal size of the family one certainly has those families in mind which have reached a more or less stable condition as regards size. Another familiar example of a similar distortion in the presentation of facts is the official figure for the average age of an Indian. Owing to the inclusion of infants, whose mortality is high in India, the average works out to be low. The birth and survival figures of this inquiry are expected to be higher, but why the death figures should be persistently higher is not clear. One pertinent fact which may be noted is that the Census Inquiry was conducted in "typical areas of each district and state." An important explanation of the difference may be found in the expression "typical," for this inquiry is entirely rural. For another thing, it has already been noted that the grouping of Ad Dharmis and Jains has been different in the two cases.

The conclusions of the Census Inquiry are at variance with those of this inquiry mainly in two respects. Firstly, the Census Inquiry shows the Muslims to be having an appreciably smaller number of children than the Hindus; this conclusion, in the very words of the Census, "will cause surprise so far as Muslims are concerned, as they are well known to be fairly prolific." The apology for this result that is given by the Census, namely, that the Muslims, who are comparatively more ignorant, forget some of their children they may have lost, speaks for itself. Another significant quotation from the Census that occurs on page 70 is, "the survival rate is highest among Indian Christians and fairly high among Muslims, who have higher birth and death rates than the Hindus." Secondly, the Census Inquiry brings out a comparatively higher death figure for the Sikhs than for the Hindus or the Muslims. In other respects, the results tally or the variation is due to these two differences. Comparison beyond this stage with the Census Inquiry would be meaningless, as the classification adopted there is different from the one taken in this inquiry.

Table 8 gives the number of children born and surviving per 100 couples according to the main religious groups sub-divided into the main social classes. Here, as in the case of tables on social classes, figures for those sub-divisions where the number of cases fell below 50 have not been entered. This has resulted in ruling out the consideration of Christian cases. Only a few Sikh groups could be taken up. In some cases a few Hindu and Muslim groups had to be ignored.

Among the Hindus the non-agriculturist class has on the average more children born than the agriculturist or the menial class. There is no marked difference in fertility between the agriculturist and the menial class. Among the Muslims the non-agriculturist has a

*Lowest class of people, corresponding to the Untouchables in other parts of India.

smaller average of children born than the other two social classes. The same story is told by the average for all the districts, which shows that the Sikh non-agriculturist has the smallest birth figure amongst the Sikhs. Among the Christians the descending order in point of fertility is agriculturist, non-agriculturist and menial. The same order is shown by the three social classes as regards effective fertility in each of the religious groups.

Taking up the same social groups, the Muslim agriculturist shows a higher total and effective fertility than the Hindu or the Sikh. Comparison with the Sikhs can only be made on the basis of the average for all the districts. The Sikh agriculturist and menial classes have a higher total fertility than the corresponding Hindus. The effective fertility of each social class among the Sikhs is higher than that of the corresponding class among the Hindus. The Christian class has steadily a higher total effective fertility for each social group.

In closing, it may again be repeated that the differences in total fertility are small; it is only in effective fertility that the differences become appreciable. Also, it may be of interest to note that the average number of children which a couple gets (on reaching steady state) in the Punjab is 5.03, of which 3.35 survive. These figures are based on the data for all the districts taken together.

Section 9.—Conclusions

The statistical side of the inquiry having been dealt with, it is now proposed to discuss the results and their implications. The first and foremost conclusion, which is persistently shown in the different analyses of the data, is that total as well as effective fertility increases slightly with an increase in income. The menials who are lowest down in the social scale and include the artisans do show a comparatively higher fertility than the other groups (such as III and VI) which are near them in economic conditions. The economic factor exercises an important influence on fertility within the same social class, fertility being higher in the case of the upper sub-divisions. In the case of effective fertility, the economic factor is so dominant that the number of children surviving is considerably lowered with a descent in the social or economic scale. Thus, it seems that fertility is affected by an interplay of social and economic causes. In India, there is a very unequal distribution of wealth with extremes of poverty and richness. The same is true of the rural Punjab, where there are many who have hardly enough means to keep life going. The criterion adopted for classifying a case as a lower agriculturist or a non-agriculturist is an average income of Rs. 200 per annum at the maximum. This can scarcely be said to be sufficient to meet the bare needs of a couple with a family of other dependents to support even under the rural conditions of few wants and simple living. The middle section in each class has a better economic position, or, at any rate, has enough to meet the elementary needs, with the result that the fertility rises. The upper section is economically well off, and the fertility is increased due probably to the easier conditions of living. In this connection a quotation from Pell's "Law of Births and Deaths" (page 109) may be given. He says: "Well fed and mentally active people of the town will be relatively infertile. Well fed and sluggish country people will be relatively fertile. But in the case of poorer townspeople the effect of greater nervous activity will, in a large

measure, be counteracted by bad feeding and overwork." In the rural Punjab, in the three main social classes, the social habits are more or less uniform and the nature of work is not varied in each class. Thus the differences in each class are purely economic. This discussion, then, seems to point that with a decrease in income the fertility is to some extent affected adversely. Owing to the greater care which the richer class can afford to bestow on children, the survival rate is higher as compared to the poorer class. Thus, at present, the upper classes are contributing to the next generation more than the poorer ones. The amount of marriage in each class—a factor which could not be taken up so far due to lack of statistics—is believed to be working in the same direction. Upper classes have presumably higher marriage rates than the poorer ones. Of the social classes, the menials do show a higher fertility, but their contribution to the next generation is not high, because of the smaller survival rate of children due to poor economic conditions.

A second point which deserves special notice is the relatively low total and effective fertilities of Class VII, the "professional" class of the village. This is the only group in a village which, as a class, is educated and is comparatively more refined in habits and culture. It is high up in the social scale, whatever be its economic position. Of course, it is not quite safe to generalise on the basis of the small number of cases that could be got in this class. However, if one is permitted to risk it, it may be said that the indication is that the real factor behind the observed low fertility of the socially better classes in the West is the cultural difference. In this inquiry classes have been considered where there is not much cultural difference—the difference being mainly economic—and the above effect of reduced fertility was not observed. The results of this study go to substantiate the opinion expressed by Dr. J. H. Hutton in the following words:

"In order that a higher standard of living may affect the rate of reproduction, it is apparent that not only is an increase in education and culture involved, since it seems definitely established that intellectual activity acts as a check on fertility but also the psychological appreciation of a higher probability of survival."

An argument in favour of the theory that fertility and social status are negatively associated is that in brain workers the nervous system is developed at the expense of the reproductive system. In the case of the rural Punjab, this argument does not have much significance, since there is no substantial difference in the intellectual development of the different grades of society. The intellectual activities of the more affluent are in no wise more advanced than those of the poorer classes. The class which is somewhat more intellectual than the general lot of villagers is the "professional" class, which does show a comparatively lower fertility. This agrees with the view-point of those who advocate spreading of education and culture in the masses for a control of population.

Even in England, conditions in respect of fertility in the nineteenth century were not what they have been observed to be to-day. David Heron has studied the problem in his paper, "On Relation of Fertility

to Social Status" by taking certain district characteristics. He observes: "We are driven to the almost certain conclusion that differences in the mean age of wives were amply sufficient in 1851 to account for the differential birth rate of districts with divergent social status. On the other hand, in 1901 the districts with the lower social status had, in a much greater degree than in 1851, a higher birth rate than those with higher social status and at least 50 per cent. of this is not attributable to differences of age at marriage, but must be associated with a reduced fertility or a less exercised fertility in the wives of those with a higher social status. We conclude, therefore, that while in the last 50 years there has been 100 per cent. increase in the intensity of the relation between low social status and higher birth rate, this increase has arisen from new causes."

Dr. Stevenson and Professor Julian Huxley have expressed similar opinions. The position in this respect of a primitive agricultural area like the one studied here can now be better imagined.

A strong reason given by those who have observed the reduced fertility of socially higher classes in the West is deliberate restriction. As Professor Carr Saunders remarked, "differences in number of children born irrespective of age are due to greater deliberate limitation of families in some groups than in others and that no facts are inexplicable on this hypothesis." (Proceedings, World Population Conference, 1927, page 140.)

On this point it would be pertinent to reproduce from "Wisdom and Waste in the Punjab" by Sir M. L. Darling (page 193) a significant dialogue between a Jatni (peasant woman) and Sir Malcolm's associate:

- "How many children do you think a woman should have?"
 "Mother earth is not satisfied with the amount of her rain, nor is the mother woman with the number of her children. A barren field and a barren woman—who will take them?"
 "But cannot a woman have too many children?"
 "Without children how can we have men, and without men who will look after God's creatures, and who will dig the tanks that we may have water to drink?"
 "But if there are many children, will they not be poor?"
 "To run the world both rich and poor are needed. If all are rich like you, who will cut the grass for your horse?"
 "How will you feed many children?"
 "It is not a mother's work to do this. Her work is to bear them and to rear them. Other things God will provide."
 "Can a woman, then, not have too many children?"
 "No number is too great. In four days the disease of khattak* took away three men from my family."
 "In Europe people would have few children, for they have anxiety how they shall live and what they shall eat."
 "They are fools (*murakh*) to think like this. God has given them to rule over other countries, and we have lost this country because we killed our daughters."

The above dialogue reflects the typical mental outlook of villagers on the question of fertility.

*This refers to the influenza of 1918.

There are indications, however that the peasant woman is beginning to inquire whether it is necessary to have many children. As Sir Malcolm puts it, elsewhere in the same book (page 311):

“This is a new voice in Indian village life, and it is inspired by two feelings. The first is profoundly human; there comes a point when a woman feels she can bear no more. ‘I have borne him fourteen children,’ said the servant’s wife, ‘I cannot bear him another.’ The second feeling is entirely modern. ‘If (said the Minstrel’s wife) there are more than four, we cannot give them proper care; they cannot get shirts and shoes and they run about naked.’”

If those who are interested in the rural reconstruction work, catch the signs and direct their energies towards making the village people, specially the womenfolk, realise the necessity for some sort of check, useful results can be achieved. Not only will the growth of population be controlled but also a better standard of living would be possible.

TABLE 1.

CORRELATION BETWEEN ECONOMIC STATUS AND FERTILITY.

References :

1. Figures in rows "A" relate to the cases when the children born within the first 20 years of marriage are taken.
2. Figures in rows "B" relate to the cases when the total number of children are taken, only couples with at least 20 years' duration of marriage being considered.
3. N stands for number of cases considered.
 My and Ty stand for the average and standard deviation of income in hundreds of rupees, Mx and Tx for the average and standard deviation of children.
 r stands for the coefficient of correlation.
 C stands for Pearson's mean square contingency coefficient.

District.		N	My	Ty	Mx	Tx	r	C
Rohtak	.. A	1,387	1.60	1.58	4.76	2.25	.04	.195
	B	949	1.60	2.61	5.30	2.70	.07	.054
Sialkot	.. A	797	1.84	1.54	5.50	2.33	.07	.149
	B	577	1.94	1.24	6.26	2.83	.13	.155
Jullundur	.. A	1,184	2.24	2.53	4.89	2.19	.11	.154
	B	818	2.22	2.52	5.13	2.61	.06	.114
Gurdaspur	.. A	1,086	1.58	1.89	5.14	2.25	.01	.131
	B	744	1.72	1.84	5.89	2.82	.04	.053
Amritsar	.. A	1,137	1.75	1.75	4.95	2.11	.03	.226
	B	970	1.80	1.77	5.75	2.54	.05	.116
Gurgaon	.. A	1,155	1.30	1.38	4.69	2.14	.16	.185
	B	825	1.28	1.29	5.68	2.78	.16	.194
Sheikhpura	.. A	969	1.81	1.91	6.07	2.34	.05	.235
	B	611	1.81	1.80	6.88	2.78	.07	.174
Lyallpur	.. A	897	2.11	2.12	5.84	2.26	.01	.090
	B	628	2.02	1.99	6.90	2.60	.06	.151
Karnal	.. A	552	1.38	1.56	5.93	3.01	.12	.234
	B	270	1.49	1.50	5.75	2.61	.08	.231
Ambala	.. A	551	1.55	1.54	4.53	2.30	.02	.182
	B	461	1.71	1.61	6.02	2.71	.12	.240
Hoshiarpur	.. A	951	1.48	1.73	5.32	2.44	-.01	.065
	B	707	1.61	1.85	5.24	2.30	.00	.079
Ludhiana	.. A	775	1.47	1.62	5.50	2.75	-.01	.153
	B	550	1.54	1.68	5.34	2.58	.01	.129
Ferozepore	.. A	839	2.02	2.04	6.23	2.55	.01	.103
	B	592	2.13	2.15	6.04	2.47	.01	.114
Gujranwala	.. A	919	1.51	1.68	6.01	2.55	.04	.131
	B	599	1.61	1.81	6.00	2.38	.03	.169
Gujrat	.. A	987	1.52	1.40	4.33	2.15	.08	.141
	B	769	1.43	1.48	5.69	2.73	.02	.158
Miauwali	.. A	825	1.77	1.90	4.63	2.11	.02	.097
	B	604	1.63	1.77	6.10	2.63	.00	.113
Jhang	.. A	1,145	1.55	1.54	5.20	2.19	.09	.105
	B	782	1.58	1.53	6.15	2.55	.10	.279
Lahore	.. A	947	1.85	1.60	4.66	2.10	.13	.146
	B	652	1.50	1.28	6.13	2.76	.19	.195
Jhelum	.. A	747	2.12	2.60	4.21	1.91	-.02	.168
	B	572	1.90	2.24	5.14	2.54	.03	.168
Rawalpindi	.. A	504	2.08	2.38	5.84	2.84	.03	.138
	B	366	2.14	2.44	5.80	2.63	.13	.167
Montgomery	.. A	626	2.27	2.29	6.35	2.63	.07	.160
	B	434	2.42	2.39	6.25	2.44	.03	.193
Multan	.. A	677	1.66	1.66	4.56	2.70	.14	.219
	B	538	1.67	1.63	5.62	2.58	.11	.190
Muzaffargarh	.. A	588	1.35	1.36	3.86	2.07	.11	.216
	B	395	1.40	1.48	5.33	2.58	-.03	.193
D. G. Khan	.. A	687	1.02	1.20	3.74	1.83	.08	.135
	B	492	.978	1.22	5.03	2.46	.06	.170

TABLE 2.

NUMBER OF CHILDREN BORN AND DEAD IN THE SOCIAL CLASSES.

References : Figures in Roman indicate the social class mentioned in Section 4-b.

Columns (a) give the number of cases examined.

" (b) give the number of total children born.

" (c) give the number of total children dead.

	I.			II.			III.			IV.			V.			VI.			VII.			VIII.		
	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)
Lyallpur ..	258	1,613	433	170	1,052	277	81	502	149	12	87	14	32	190	49	68	399	112	33	188	49	323	1,995	631
Sialkot ..	86	529	187	88	495	171	182	906	339	59	335	119	84	465	183	125	636	214	61	323	119	294	1,638	576
Gurdaspur ..	207	1,174	337	132	670	199	244	1,119	387	56	308	70	80	416	126	80	393	139	86	372	135	489	2,336	801
Sheikhupura ..	178	1,101	312	83	496	116	307	1,701	494	15	103	30	21	120	35	41	196	74	40	238	64	380	2,349	1,011
Gurgaon ..	176	987	328	186	909	324	366	1,582	546	55	281	97	69	341	136	102	427	215	68	326	136	438	1,981	863
Amritsar ..	307	1,619	436	282	1,463	400	225	1,207	397	100	559	188	94	501	166	152	754	240	91	474	194	549	2,650	902
Jullundur ..	487	2,255	610	271	1,045	300	233	1,055	335	83	398	114	57	315	85	76	362	119	114	555	201	605	2,944	935
Rohtak ..	342	1,650	394	330	1,562	522	396	1,860	636	84	390	122	100	434	159	48	205	70	12	49	11	348	1,588	555
Karnal ..	193	1,029	441	157	748	293	154	733	312	19	141	58	47	293	139	35	173	99	13	54	18	315	1,479	617
Ambala ..	169	932	402	154	781	285	177	910	422	36	176	63	32	159	53	46	240	131	18	68	40	191	922	342
Hoshiarpur ..	182	907	227	220	1,085	260	458	2,147	773	84	425	113	126	631	206	97	489	159	83	406	130	355	1,745	659
Ludhiana ..	162	856	237	211	1,071	273	245	1,155	368	50	264	79	82	416	151	62	323	139	55	232	96	417	2,035	815
Ferozepore ..	428	2,345	759	220	1,187	451	132	1,714	251	25	119	36	25	119	30	56	298	112	38	221	82	419	2,320	864
Gujranwala ..	226	1,217	430	195	1,019	352	188	966	376	44	228	82	96	514	203	135	699	250	51	252	91	573	3,029	1,250
Gujrat ..	184	1,010	307	198	954	298	322	1,543	538	90	453	134	91	456	166	63	244	78	35	167	38	335	1,627	591
Mianwali ..	265	1,450	437	102	543	208	131	707	282	61	311	74	70	350	94	96	465	196	41	214	81	346	1,806	709
Jhang ..	141	769	157	133	713	183	265	1,421	378	27	159	43	65	380	74	121	594	214	33	173	54	491	2,605	849
Lahore ..	191	1,102	276	153	848	267	205	976	304	6	34	3	34	165	40	62	326	107	37	192	62	377	1,932	606
Jhelum ..	188	859	273	190	897	287	153	678	217	49	259	49	55	239	48	107	488	137	68	285	86	169	810	297
Rawalpindi ..	142	714	193	136	655	160	222	1,028	277	67	361	72	129	643	231	79	392	116	69	299	82	102	470	166
Montgomery ..	260	1,494	418	169	941	273	154	822	198	27	158	69	52	286	101	58	309	95	30	151	39	297	1,631	566
Multan ..	251	1,242	408	109	573	187	53	259	69	48	263	79	101	615	150	135	580	217	53	234	87	443	1,979	681
Muzaffargarh ..	75	363	116	44	176	41	155	718	216	35	171	48	80	373	159	111	464	183	24	90	27	225	913	321
D. G. Khan ..	190	828	299	104	463	163	192	805	264	16	70	27	28	132	67	69	291	119	18	76	24	367	1,474	613

TABLE 3.

NUMBER OF CHILDREN BORN AND SURVIVING PER 100 COUPLES IN THE MAIN SOCIAL CLASSES.

References :

- Columns I give number of cases taken.
 " II give children born per 100 couples.
 " III give children surviving per 100 couples.

District.	AGRICULTURIST.			NON-AGRICULTURIST.			MENIAL.		
	I.	II.	III.	I.	II.	III.	I.	II.	III.
Lyalpur ..	509	622	453	145	596	442	323	618	423
Sialkot ..	356	542	346	329	535	342	294	557	361
Gurdaspur ..	583	521	363	302	493	337	489	478	314
Sheikhupura ..	568	582	420	117	553	379	380	618	352
Gurgaon ..	728	478	313	294	472	273	438	452	255
Amritsar ..	814	527	376	437	521	341	549	483	319
Jullundur ..	991	440	315	330	493	315	605	490	336
Rohtak ..	1,068	475	330	244	441	293	348	456	297
Karnal ..	504	498	291	114	579	304	315	470	274
Ambala ..	500	525	303	132	487	326	191	483	304
Hoshiarpur ..	860	481	324	390	500	304	355	492	306
Ludhiana ..	618	498	356	249	492	306	417	488	293
Ferozepore ..	780	544	357	144	526	346	419	554	348
Gujranwala ..	608	527	335	326	520	328	573	529	311
Gujrat ..	714	492	332	279	473	323	335	486	309
Mianwali ..	498	541	355	268	500	336	346	521	316
Jhang ..	539	539	406	246	512	365	491	531	358
Lahore ..	549	533	380	139	516	363	377	512	351
Jhelum ..	531	458	312	279	456	341	169	479	303
Rawalpindi ..	500	479	353	344	493	347	102	461	298
Montgomery ..	583	559	406	167	541	359	297	549	358
Multan ..	413	502	341	337	472	314	443	447	293
Muzaffargarh ..	274	459	323	250	439	272	225	406	263
D. G. Khan ..	486	431	282	131	434	253	367	402	235
<i>All the Districts</i> ..	<i>14,574</i>	<i>507</i>	<i>348</i>	<i>5,993</i>	<i>499</i>	<i>330</i>	<i>8,848</i>	<i>501</i>	<i>318</i>

TABLE 4.
NUMBER OF CHILDREN BORN AND SURVIVING PER HUNDRED COUPLES IN THE SOCIAL CLASSES.

References :—Figures in capital Romans indicate the social class.

Columns (i) give number of cases examined.

" (ii) give number of children born per 100 couples.

" (iii) give number of children surviving per 100 couples.

District.	I			II			III			IV			V			VI			VII			VIII		
	(i)	(ii)	(iii)	(i)	(ii)	(iii)	(i)	(ii)	(iii)	(i)	(ii)	(iii)	(i)	(ii)	(iii)	(i)	(ii)	(iii)	(i)	(ii)	(iii)	(i)	(ii)	(iii)
Lyallpur ..	258	625	458	170	619	456	81	620	436	..	..	..	..	..	..	68	586	421	..	..	..	323	618	423
Sialkot ..	86	615	398	88	563	369	182	498	312	59	568	366	84	554	336	125	509	338	61	530	335	294	557	361
Gurdaspur ..	207	567	404	132	508	357	244	488	329	56	550	425	80	520	362	80	491	317	86	433	276	489	478	314
Sheikhupura ..	178	619	444	83	597	457	307	554	393	..	..	..	..	..	..	..	..	..	..	..	..	380	618	352
Gurgaon ..	176	561	375	186	489	321	366	432	281	55	511	333	69	494	297	102	418	218	68	480	280	439	452	255
Amritsar ..	307	527	385	282	520	379	225	536	360	100	559	371	94	533	357	152	496	337	91	521	398	549	483	319
24 Jullundur ..	487	463	338	271	386	265	233	453	310	83	480	343	57	553	404	76	476	320	114	487	312	605	490	336
Rohtak ..	342	482	367	330	473	315	396	470	309	84	464	281	100	434	275	48	427	281	..	..	..	348	456	297
Karnal ..	193	533	305	159	476	290	154	476	274	..	..	..	..	..	..	..	..	..	..	..	..	315	470	274
Ambala ..	169	552	314	154	507	322	177	514	276	..	..	..	..	..	..	..	..	..	..	..	..	191	483	304
Hoshiarpur ..	182	498	373	220	493	375	458	469	300	84	506	371	126	501	338	97	504	340	83	489	332	355	492	306
Ludhiana ..	162	528	382	211	508	379	245	471	321	50	528	370	82	507	323	62	521	297	55	422	247	417	498	293
Ferozepore ..	428	548	371	220	540	335	132	541	251	..	..	..	..	..	..	56	532	332	..	..	..	419	554	348
Gujrauwala ..	226	538	348	194	525	344	188	514	314	..	..	..	96	536	325	135	518	333	51	494	316	573	529	311
Gujrat ..	194	521	363	198	482	331	322	478	311	90	503	394	91	501	320	63	387	263	..	..	..	335	486	309
Mianwali ..	265	547	382	102	532	328	131	536	321	61	510	389	70	500	366	96	484	290	..	..	..	346	521	316
Jhang ..	141	545	434	133	535	397	265	536	393	..	..	..	65	585	471	121	574	397	..	..	..	491	531	358
Lahore ..	191	577	433	153	554	386	205	476	328	..	..	..	..	..	..	62	526	354	..	..	..	377	512	351
Jhelum ..	188	457	312	190	472	321	153	443	301	..	..	..	55	435	348	107	456	328	68	419	293	169	479	303
Rawalpindi ..	142	503	367	136	481	363	222	463	338	67	539	432	129	498	319	79	496	349	69	433	314	102	461	298
Montgomery ..	260	575	414	169	557	395	154	534	405	..	..	..	52	554	360	58	533	369	..	..	..	297	549	358
Multan ..	251	495	332	109	526	354	53	489	359	..	..	..	101	510	361	135	430	270	53	442	278	443	447	293
Muzaffargarh ..	75	484	329	..	..	..	155	463	324	..	..	..	80	466	267	111	418	253	..	..	..	225	406	263
D. G. Khan ..	190	436	279	104	445	288	192	419	281	..	..	..	..	..	..	69	422	250	..	..	..	367	402	235
<i>All the Districts</i>	<i>5,298</i>	<i>529</i>	<i>370</i>	<i>4,037</i>	<i>504</i>	<i>348</i>	<i>5,240</i>	<i>487</i>	<i>324</i>	<i>1,148</i>	<i>527</i>	<i>372</i>	<i>1,650</i>	<i>512</i>	<i>339</i>	<i>2,024</i>	<i>482</i>	<i>308</i>	<i>1,171</i>	<i>482</i>	<i>316</i>	<i>8,848</i>	<i>500</i>	<i>317</i>

TABLE 5.
CHART SHOWING THE RELATIVE POSITION OF THE SOCIAL CLASSES WHEN PLACED IN ORDER OF FERTILITY
AND EFFECTIVE FERTILITY FIGURES (DISTRICT-WISE).

Reference :—

Figures in Roman indicate the Social Class, as follows :

- | | |
|-------------------------------|-------------------------------|
| I.—Upper Agriculturists. | V.—Middle Non-agriculturists. |
| II.—Middle Agriculturists. | VI.—Lower Non-agriculturists. |
| III.—Lower Agriculturists. | VII.—Professionals. |
| IV.—Upper Non-agriculturists. | VIII.—Menials. |

District. Position—	FERTILITY.								EFFECTIVE FERTILITY.							
	1st	2nd	3rd	4th	5th	6th	7th	8th	1st	2nd	3rd	4th	5th	6th	7th	8th
Lyallpur ..	I	III	II	VIII	VI	..	..	..	I	II	III	VIII	VI	..	..	..
Sialkot ..	I	IV	II	VIII	V	VII	VI	III	I	II	IV	VIII	VI	V	VII	III
Gurdaspur ..	I	IV	V	II	VI	III	VIII	VII	IV	I	V	II	III	VI	VIII	VII
Sheikhupura ..	I	VIII	II	III	..	..	..	..	II	I	III	VIII	..	..	..	..
Gurgaon ..	I	IV	V	II	VII	VIII	III	VI	I	IV	II	V	III	VII	VIII	VI
Amritsar ..	IV	III	V	I	VII	II	VI	VIII	I	II	IV	III	V	VI	VIII	VII
Jullundur ..	V	VIII	VII	IV	VI	I	III	II	V	IV	I	VIII	VI	VII	III	II
Rohtak ..	I	II	III	IV	VIII	V	VI	..	I	II	III	VIII	IV	VI	V	..
Karnal ..	I	II	III	VIII	..	..	..	..	I	II	III	VIII	..	..	..	..
Ambala ..	I	III	II	VIII	..	..	..	..	II	I	VIII	III	..	..	..	..
Hoshiarpur ..	IV	VI	V	I	II	VIII	VII	III	II	I	IV	VI	V	VII	VIII	III
Ludhiana ..	I	IV	VI	II	V	VIII	III	VII	I	II	IV	V	III	VI	VIII	VII
Ferozepore ..	VIII	I	III	II	VI	..	..	..	I	VIII	II	VI	III	..	..	..
Gujranwala ..	I	V	VIII	II	VI	III	VII	..	I	II	VI	V	VII	III	VIII	..
Gujrat ..	I	IV	V	VIII	II	III	VI	..	I	IV	II	V	III	VIII	VI	..
Mianwali ..	I	III	II	VIII	IV	V	VI	..	IV	I	V	II	III	VIII	VI	..
Jhang ..	V	VI	I	III	II	VIII	..	..	V	I	II	VI	III	VIII	..	..
Lahore ..	I	II	VI	VIII	III	..	..	..	I	II	VI	VIII	III	..	..	..
Jhelum ..	VIII	II	I	VI	III	V	VII	..	V	VI	II	I	VIII	III	VII	..
Rawalpindi ..	IV	I	V	VI	II	III	VIII	VII	IV	I	II	VI	III	V	VII	VIII
Montgomery ..	I	II	V	VIII	III	VI	..	..	I	III	II	V	VI	VII	..	..
Multan ..	II	V	I	III	VIII	VII	VI	..	V	III	II	I	VIII	VII	VI	..
Muzaffargarh ..	I	V	III	VI	VIII	..	..	..	I	III	V	VIII	VI	..	..	..
D. G. Khan ..	II	I	VI	III	VIII	..	..	..	II	III	I	VI	VIII	..	..	..

TABLE 6.

NUMBER OF CHILDREN BORN AND DEAD ACCORDING TO MAIN RELIGION AND MAIN SOCIAL CLASS.

References :

Columns I refer to agriculturist class.
Columns II refer to non-agriculturist class.
Columns III refer to menial class.

Rows (a) give the number of cases examined.
Rows (b) give the number of children born.
Rows (c) give the number of children dead.

District.	HINDUS.			Total Hindus.	MUSLIMS.			Total Muslims	SIKHS.			Total Sikhs.	CHRISTIANS.			Total Christians.	
	I	II	III		I	II	III		I	II	III		I	II	III		
Iyallpur	(a)	20	39	125	184	385	89	160	634	97	15	36	148	7	2	14	23
	(b)	124	219	736	1,079	2,468	512	956	3,936	553	89	217	859	38	7	87	132
	(c)	31	69	215	315	641	129	369	1,139	140	20	65	225	12	1	23	36
Sialkot	(a)	84	124	118	326	234	162	148	544	39	11	4	54	6	35	54	95
	(b)	465	619	587	1,701	1,316	909	798	3,023	200	55	24	279	30	195	305	530
	(c)	104	243	217	654	415	337	271	1,023	52	16	6	74	12	61	96	169
Gurdaaspur	(a)	151	152	206	508	269	94	219	572	143	52	36	231	15	23	44	82
	(b)	768	778	1,019	2,565	1,408	452	1,037	2,895	718	235	193	1,146	87	112	225	424
	(c)	311	398	393	1,092	362	152	329	843	225	57	34	316	21	29	50	100
Sheikhpura	(a)	19	32	12	63	302	23	287	612	161	16	6	183	94	36	93	223
	(b)	117	189	79	385	1,794	161	1,792	3,747	929	106	30	974	595	198	479	1,272
	(c)	39	49	43	131	487	65	660	1,212	244	40	10	294	154	68	154	366
Gurgaon	(a)	451	188	331	970	286	106	116	508	..	..	..	..	..	..	..	..
	(b)	2,012	939	1,555	4,506	1,318	504	529	2,351	..	..	..	..	..	..	..	..
	(c)	694	349	613	1,656	484	202	221	907	..	..	..	..	..	..	..	..
Amritsar	(a)	121	89	90	300	378	237	312	927	280	71	85	436	22	9	43	74
	(b)	586	460	394	1,440	2,049	1,184	1,588	4,821	1,339	308	372	2,019	97	60	199	356
	(c)	178	162	139	479	617	390	607	1,518	368	72	124	564	24	25	57	106
Jullundur	(a)	165	111	277	653	685	173	275	1,133	164	37	25	226	..	..	..	..
	(b)	743	532	1,244	2,519	3,218	827	1,346	5,391	744	185	137	1,066	..	..	..	..
	(c)	228	193	438	859	1,068	308	461	1,857	242	60	68	360	..	..	..	..
Rohtak	(a)	869	222	278	1,369	188	20	51	259	..	..	..	..	..	..	..	..
	(b)	4,012	969	1,253	6,234	893	110	229	1,232	..	..	..	..	..	..	..	..
	(c)	1,190	332	430	1,952	314	29	94	437	..	..	..	..	..	..	..	..
Karnal	(a)	461	80	223	764	151	23	103	277	..	..	..	..	..	..	..	..
	(b)	2,410	487	1,050	3,947	854	124	495	1,473	..	..	..	..	..	..	..	..
	(c)	730	244	408	1,382	280	49	203	532	..	..	..	..	..	..	..	..
Ambala	(a)	184	63	140	387	176	36	45	257	64	46	60	160	..	..	..	..
	(b)	915	314	684	1,913	1,007	146	218	1,371	331	205	243	779	..	..	..	..
	(c)	392	118	263	773	421	71	86	578	122	81	82	285	..	..	..	..

(Continued)

Hoshiarpur	(a)	480	309	232	1,021	243	78	91	412	143	22	7	172	..	..	..	..
	(b)	2,153	1,511	1,024	4,688	1,318	406	461	2,185	675	88	31	794	..	..	..	..
	(c)	630	474	387	1,491	381	134	146	661	180	28	16	224	..	..	..	..
Ludhiana	(a)	32	90	169	291	392	84	179	655	223	77	56	356	..	..	..	..
	(b)	156	404	816	1,376	1,815	426	905	3,146	1,027	371	263	1,661	..	..	..	..
	(c)	50	128	281	459	539	176	307	1,022	274	119	112	505	..	..	..	..
Ferozepore	(a)	54	23	81	158	313	77	250	640	400	41	94	535	..	..	..	..
	(b)	331	106	398	835	1,778	411	1,454	3,643	2,038	215	528	2,781	..	..	..	..
	(c)	104	50	130	284	629	150	570	1,349	702	57	162	921	..	..	..	..
Gujranwala	(a)	71	129	31	231	480	166	504	1,150	88	19	7	114	15	9	73	97
	(b)	377	716	163	1,256	2,505	876	2,654	6,035	462	91	30	583	79	46	366	491
	(c)	92	256	56	404	939	299	1,077	2,315	187	35	22	244	25	7	146	173
Gujrat	(a)	46	39	18	103	640	183	309	1,132	18	48	34	100	..	..	..	..
	(b)	243	244	88	575	3,771	1,013	1,840	6,624	103	286	196	585	..	..	..	..
	(c)	57	71	29	152	1,050	265	555	1,870	26	71	61	158	..	..	..	..
Mianwali	(a)	117	121	31	269	380	140	315	835	..	..	..	..	..	..	..	..
	(b)	567	590	194	1,341	2,078	726	1,606	4,410	..	..	..	..	..	..	..	..
	(c)	181	188	85	454	756	238	610	1,604	..	..	..	..	..	..	..	..
Jhang	(a)	81	152	79	312	451	75	430	956	14	20	3	37	..	..	..	..
	(b)	431	768	400	1,599	2,422	385	2,193	5,000	81	113	10	204	..	..	..	..
	(c)	158	261	158	577	872	141	720	1,733	18	26	1	45	..	..	..	..
Lahore	(a)	4	29	17	50	344	78	239	661	79	3	25	107	120	48	73	241
	(b)	30	116	81	227	1,815	394	1,412	3,621	375	16	127	518	739	307	412	1,458
	(c)	11	43	28	82	493	111	385	989	103	9	29	131	196	92	136	424
Jhelum	(a)	23	84	6	113	504	169	160	833	15	31	51	97	..	..	..	..
	(b)	136	455	37	628	2,814	912	832	4,558	79	158	275	502	..	..	..	..
	(c)	30	152	9	191	860	296	313	1,469	21	41	63	125	..	..	..	..
Rawalpindi	(a)	7	18	..	25	495	225	104	824	9	86	4	99	..	..	..	..
	(b)	34	83	..	117	2,359	1,007	444	3,810	68	406	4	478	..	..	..	..
	(c)	11	17	..	28	561	283	151	995	14	117	..	131	..	..	..	..
Montgomery	(a)	56	51	36	143	468	87	224	779	54	35	42	131	..	..	..	..
	(b)	272	256	177	705	2,506	438	1,228	4,172	285	166	215	666	..	..	..	..
	(c)	77	94	88	259	771	134	412	1,317	92	40	45	177	..	..	..	..
Multan	(a)	192	185	73	450	211	124	363	698	10	5	5	20	..	..	..	..
	(b)	915	901	348	2,164	1,070	601	1,789	3,460	39	24	24	87	..	..	..	..
	(c)	310	324	126	760	327	201	725	1,253	7	11	4	22	..	..	..	..
Muzaffargarh	(a)	88	159	40	287	178	79	185	442	..	..	..	..	..	..	..	..
	(b)	372	670	172	1,214	784	328	772	1,884	..	..	..	..	..	..	..	..
	(c)	116	239	79	434	242	124	288	654	..	..	..	..	..	..	..	..
Dera Ghazi Khan	(a)	76	40	14	130	354	85	309	748	..	..	..	..	..	..	..	..
	(b)	324	165	65	554	1,556	360	1,227	3,143	..	..	..	..	..	..	..	..
	(c)	116	67	22	205	533	145	523	1,201	..	..	..	..	..	..	..	..

TABLE 7.
NUMBER OF CHILDREN BORN AND SURVIVING PER 100 COUPLES ACCORDING TO RELIGION.

References —

Columns I give the number of cases examined.

Columns II give the children born per 100 couples.

Columns III give the children dead per 1,000 born.

Columns IV give the children surviving per 100 couples.

District.	HINDUS.				MUSLIMS.				SIKHS.				CHRISTIANS.			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Lyallpur ..	184	584	294	412	634	620	387	440	97	580	264	427	..	..	..	..
Sialkot ..	326	522	385	321	544	556	338	368	54	518	264	381	95	558	317	381
Gurdaspur ..	508	504	305	350	572	506	292	358	231	496	276	359	82	516	300	394
Gurgaon ..	970	465	368	320	508	462	380	328	..	..	..	..	..	..	..	..
Sheikhpura ..	63	611	340	403	612	612	300	430	183	582	280	421	223	570	280	413
Amritsar ..	300	480	333	320	927	502	346	328	436	463	272	336	74	481	300	338
Jullundur ..	553	466	341	301	1,133	476	444	312	226	471	338	311	..	..	..	..
Rohtak ..	1,369	455	314	312	259	476	355	307	..	..	..	..	..	..	..	..
Karnal ..	764	517	350	336	277	532	357	342	..	..	..	..	..	..	..	..
Ambala ..	387	494	403	295	257	533	422	308	160	487	365	359	..	..	..	..
Hoshiarpur ..	1,021	460	301	314	412	530	300	370	172	460	287	328	..	..	..	..
Ludhiana ..	291	472	303	314	655	480	325	324	356	466	303	325	..	..	..	..
Ferozepore ..	158	529	340	349	640	570	570	359	535	520	303	348	..	..	..	..
Gujranwala ..	231	545	321	370	1,150	525	383	324	114	516	361	381	97	506	363	322
Gujrat ..	103	558	273	406	1,132	585	282	420	100	585	270	427	..	..	..	..
Mianwali ..	269	499	339	270	835	528	363	336	..	..	..	..	..	..	..	..
Jhang ..	313	513	323	328	956	523	346	312	..	..	..	..	..	..	..	..
Lahore ..	50	494	332	330	661	548	273	398	107	484	252	362	241	605	291	429
Jhelum ..	113	556	306	386	833	547	320	372	97	528	242	401	..	..	..	..
Rawalpindi ..	..	..	..	..	824	462	262	341	99	478	273	346	..	..	..	..
Montgomery ..	143	486	309	305	779	536	315	367	131	509	265	374	..	..	..	..
Multan ..	450	481	351	312	698	496	365	315	..	..	..	..	..	..	..	..
Muzaffargarh ..	287	424	356	273	442	426	349	277	..	..	..	..	..	..	..	..
D. G. Khan ..	130	426	370	268	748	420	383	259	..	..	..	..	..	..	..	..
<i>All the Districts ..</i>	<i>9,907</i>	<i>481</i>	<i>315</i>	<i>317</i>	<i>16,145</i>	<i>512</i>	<i>338</i>	<i>339</i>	<i>3,206</i>	<i>478</i>	<i>301</i>	<i>346</i>	<i>835</i>	<i>558</i>	<i>296</i>	<i>393</i>

TABLE 8.

NUMBER OF CHILDREN BORN AND SURVIVING PER 100 COUPLES
ACCORDING TO THE MAIN RELIGIOUS GROUPS SUB-DIVIDED
INTO MAIN SOCIAL CLASS.

References :

Columns I refer to Agriculturist class.

" II refer to Non-agriculturist class.

" III refer to Menial class.

Figures in rows "A" relate to the number of children born and those in rows "B" to the number of children surviving per 100 couples.

		HINDUS.			MUSLIMS.			SIKHS.		
		I	II	III	I	II	III	I	II	III
1. Lyallpur	.. A	..	..	589	641	575	598	570	..	..
	.. B	..	..	417	475	430	367	426	..	..
2. Sialkot	.. A	554	523	497	562	561	539	..	..	..
	.. B	323	327	313	385	41	356	..	..	..
3. Gurdaspur	.. A	509	512	495	523	481	474	502	452	..
	.. B	303	250	311	388	319	324	345	342	..
4. Sheikhpura	.. A	..	..	..	594	..	624	534	..	..
	.. B	..	..	..	433	..	392	428	..	..
5. Gurgaon	.. A	446	500	470	458	475	456	..	..	..
	.. B	292	314	285	289	284	265	..	..	..
6. Amritsar	.. A	484	517	438	542	507	509	478	434	438
	.. B	337	335	284	379	335	314	347	333	222
7. Jullundur	.. A	450	480	449	470	478	489	454	..	..
	.. B	312	306	291	314	300	314	306	..	..
8. Rohtak	.. A	462	436	451	475	..	449	..	..	..
	.. B	325	286	206	308	..	265	..	..	..
9. Karnal	.. A	523	609	408	566	..	481	..	..	..
	.. B	365	304	288	381	..	294	..	..	..
10. Ambala	.. A	497	498	489	572	..	..	517	..	486
	.. B	284	311	301	333	..	..	326	..	324
11. Hoshiarpur	.. A	449	489	441	542	546	507	472	..	..
	.. B	318	336	274	385	374	347	346	..	..
12. Ludhiana	.. A	..	449	493	463	507	506	461	482	470
	.. B	..	307	317	318	306	335	338	328	298
13. Ferozepore	.. A	613	..	491	568	534	582	510	..	562
	.. B	420	..	331	367	339	354	334	..	390
14. Gujranwala	.. A	531	555	..	522	523	527	525	..	..
	.. B	401	357	..	326	348	313	312	..	..
15. Gujrat	.. A	..	..	..	589	554	596	..	..	..
	.. B	..	..	..	425	409	416	..	..	..
16. Mianwali	.. A	485	488	594	547	519	510	..	..	..
	.. B	331	333	320	348	349	316	..	..	..
17. Jhang	.. A	532	505	506	537	513	510	..	..	..
	.. B	337	333	306	344	325	343	..	..	..
18. Lahore	.. A	..	..	..	528	505	591	475	..	..
	.. B	..	..	..	379	361	330	345	..	..
19. Jhelum	.. A	..	542	..	558	539	520	..	..	540
	.. B	..	361	..	387	264	324	..	..	417
20. Rawalpindi	.. A	..	..	..	476	448	427	..	472	..
	.. B	..	..	..	363	322	282	..	336	..
21. Montgomery	.. A	490	520	..	535	503	548	528	..	..
	.. B	352	336	..	370	349	364	358	..	..
22. Multan	.. A	476	486	477	508	484	493	..	..	..
	.. B	315	311	304	353	322	293	..	..	..
23. Muzaffargarh	.. A	423	421	430	440	415	417	..	..	..
	.. B	291	252	232	304	258	261	..	..	..
24. D. G. Khan	.. A	426	..	..	440	423	397	..	..	..
	.. B	269	..	..	299	250	228	..	..	..
<i>All the Districts</i>	.. A	480	495	478	513	505	508	500	491	503
	.. B	326	316	302	348	339	320	354	388	346
<i>Christians of all the Districts</i>	.. A	597	571	526						
	.. B	438	402	358						

QUESTIONNAIRE USED IN THE INQUIRY BOARD OF ECONOMIC INQUIRY, PUNJAB

INQUIRY INTO THE RELATIONSHIP BETWEEN FERTILITY AND ECONOMIC STATUS

Village _____

Date _____

Serial No. _____

PART I

FERTILITY

1. Is the family single or joint ?.....
2. Head of family : Name..... Father's name.....
Religion..... Caste..... Profession.....
3. Number of persons living in the family : (Persons temporarily absent should be included and guests and married daughters staying with the family for a short time should be excluded.)

MALES.			FEMALES.		
Name and relationship with head of family.	Profession.	Present age in years.	Relationship with male head of family.	Present age in years.	Profession, if any.
1	..		1	..	
2	..		2	..	
3	..		3	..	
4	..		4	..	
5	..		5	..	
6	..		6	..	
7	..		7	..	
8	..		8	..	
9	..		9	..	
10	..		10	..	
11	..		11	..	
12	..		12	..	

Note.—1. Name of the head of family must be entered.
2. If a man has more than one wife, mention the fact.

4. Age at which marriage took place, of all married males in the family :

	Name.	AGE AT MARRIAGE—		Age of wife at time of "muklava."*	Age of wife when first child was born.	Remarks.
		Bridegroom.	Bride.			
1	..					
2	..					
3	..					
4	..					
5	..					
6	..					
7	..					
8	..					
9	..					
10	..					

* "Muklava" means when the bride went to live with her husband permanently.

Note.—If a man has married more than once, give the ages at each marriage.

5. Total number of children (living or dead) born to each married male in the family. Children, whether minor or grown up, and married daughters, living away from the family should be included. If a man has married more than once mention separately the children by each wife, whether she is living or dead.

Father's name.	CHILDREN.									
	MALES.					FEMALES.				
	Total born.	No. living.	Present ages.	No. dead.	Age at death.	Total born.	No. living.	Present ages.	No. dead.	Age at death.

6. If possible, give here the genealogical tree of the family (starting with the head of the family or slightly earlier): persons dead should be encircled. Give also causes of death, *e. g.*, fever, consumption, pneumonia, small-pox, plague, accident, etc.

PART II
ECONOMIC STATUS

1. Enter the land owned, if any, in the following table :

Kind of land.	TOTAL AREA OWNED—		OF WHICH MORTGAGED—	
	In the village.	Outside.	In the village.	Outside.
	Acres.	Acres.	Acres.	Acres.
Chahi (well-irrigated) ..				
Nahri (canal-irrigated) ..				
Barani (rained) ..				
Others ..				
Uncultivated ..				
TOTAL ..				

2-A.—Land cultivated by the family in kharif 1934 and rabi 1935 :

("Kharif" : summer crops or autumn harvest; "Rabi" : winter crops or summer harvest.)

	OWNED.	TAKEN ON BATAI.*		TAKEN ON CASH RENT.		OTHERS, e.g., on mortgage	TOTAL.
		Area.	Rate.	Area.	Rent†		
		Acres.	Acres.	Acres.	Rs.			Acres.	Acres.
In the village ..							
Outside ..							
TOTAL ..							

*Share-rental.

†Give total rent and not per acre.

2-B.—Land leased out in kharif 1934 and rabi 1935 :

	ON BATAI RENT.		ON CASH RENT.		ON OTHERS.	
	Rate.	Area.	Rate.	Area.	Rate.	Area.
	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.
In the village ..						
Outside ..						
TOTAL ..						

3. Total land revenue paid on all land whether owned or cultivated (For kharif 1934 and rabi 1935.)

4. If not a cultivator, amount of professional (halsiyat) or income-tax paid
Halsiyat tax, Rs. _____; Income-tax, Rs. _____.

5. Annual income from sources other than land :

	Rs.
(a) Cartage	
(b) Sale of fuel and grass	
(c) Sale of milk or milk produce	
(d) Sale of poultry	
(e) Casual labour	
(f) Service	
(g) Miscellaneous	
TOTAL	

6. For members employed in service, if any, give the nature of the service of each person, and his wages or salary drawn per annum :

7. Give the number of milch and plough animals kept by the family :

8. Is the family in debt? If so, give your estimate of the amount of debt (principal and interest accrued), and the rates of interest paid :

9. If the family is not in debt, state the amount saved, if any, to meet emergencies :

10. Give the amount of debt incurred on account of litigation during the last few years :

11. Give your opinion as to whether the family under inquiry can be classed as :

-(a) Indigent.
-(b) Living above indigence but not in comfort.
-(c) Living in comfort.
-(d) Living in luxury.

(Put a cross (X) against the class in which the family comes.)

PART III
INCOME IN KIND FROM LAND

- Note.*—1. For cultivators and landowners give the total amounts they received from all their land whether within or without the village, after deductions had been made on the threshing floor for menials, etc.
2. For menials give the total amounts they received as customary dues from all the cultivators for whom they have worked.
3. Values of produce sold should be ascertained from the seller.
4. For fodders give the area in acres and kanals.

Crop.	Amount received.	AMOUNT SOLD.		Amount given in debt.	Amount retained for home consumption.
		Amount.	Value.		
	Mds.	Mds.	Rs.	Mds.	Mds.
<i>Khari</i> 1934—					
Sugarcane ..					
Cotton, desi ..					
" , American ..					
Rice ..					
Maize ..					
Jowar ..					
Bajra ..					
Minor grains ..					
Mash ..					
Mung ..					
Moth ..					
Arhar ..					
Other lentils ..					
Chari ..					
Gowara ..					
Other fodders ..					
San-hemp ..					
Sankukra ..					
Vegetables ..					
Melons ..					
Other fruits ..					
Chillies ..					
Spices ..					
Indigo ..					
Others ..					
<i>Rabi</i> 1935—					
Wheat ..					
Barley ..					
Gram ..					
Wheat-gram ..					
Linseed ..					
Rai ..					
Taramira ..					
Sarson or sarshaf ..					
Senji ..					
Other fodders ..					
Massar ..					
Mattar ..					
Other pulses ..					
Condiments and spices ..					
Potatoes ..					
Carrots ..					
Other vegetables ..					
Fruits ..					
Others ..					
TOTAL ..					

[August, 1939]

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