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ROYAL COMMISSION

ON

AGRICULTURE IN INDIA

Volume II

Part II

EVIDENCE

TAKEN IN THE

Bombay Presidency



CALCUTTA: GOVERNMENT OF INDIA CENTRAL PUBLICATION BRANCH

1927

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INTERIM REPORT.

To

THE KING'S MOST EXCELLENT MAJESTY.

May It Please Your Majesty,

We, the Commissioners appointed to examine and report on the present conditions of agricultural and rural economy in British India, and to make recommendations for the improvement of agriculture and to promote the welfare and prosperity of the rural population; in particular, to investigate:—(a) the measures now being taken for the promotion of agricultural and veterinary research, experiment, demonstration and education, for the compilation of agricultural statistics, for the introduction of new and better crops and for improvement in agricultural practice, dairy farming and the breeding of stock; (b) the existing methods of transport and marketing of agricultural produce and stock; (c) the methods by which agricultural operations are financed and credit afforded to agriculturists; (d) the main factors affecting rural prosperity and the welfare of the agricultural population; and to make recommendations; availing ourselves of Your Majesty's permission to report our proceedings from time to time, desire to submit to Your Majesty the minutes of the further evidence which we have taken in respect of the Bombay Presidency on the subject of our Inquiry.

All of which we most humbly submit for Your Majesty's most gracious consideration.

(Signed) LINLITHGOW,

Chairman.

(· ,,) H. S. LAWRENCE.

(") T. H. MIDDLETON.

") J. MACKENNA.

(,,) H. CALVERT.

(..) N. GANGULEE.

(,,) L. K. HYDER.

(,,) B. Š. KAMAT.

(Signed) J. A. Madan, (,,) F. W. H. Smith,

Joint Secretaries.

2nd August, 1927.

(62471)



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TERMS OF REFERENCE

Generally,

To examine and report on the present conditions of agriculture and rural economy in British India and to make recommendations for the improvement of agriculture and the promotion of the welfare and prosperity of the rural population;

In particular to investigate-

- (a) the measures now being taken for the promotion of agricultural and veterinary research, experiment, demonstration and education, for the compilation of agricultural statistics, for the introduction of new and better crops and for improvement in agricultural practice, dairy farming and the breeding of stock;
- (b) the existing methods of transport and marketing of agricultural produce and stock;
- (c) the methods by which agricultural operations are financed and credit afforded to agriculturists;
- (d) the main factors affecting rural prosperity and the welfare of the agricultural population;

and to make recommendations.

It will not be within the scope of the Commission's duties to make recommendations regarding the existing system of landownership and tenancy or of the assessment of land revenue and irrigation charges, or the existing division of functions between the Government of India and the local Governments. But the Commission shall be at liberty to suggest means whereby the activities of the Governments in India may best be co-ordinated and to indicate directions in which the Government of India may usefully supplement the activities of local Governments.

QUESTIONNAIRE

PART I

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Un	estion.

- 1. Research.
- 2. Agricultural education.
 - 3. Demonstration and propaganda.
- 4. Administration.
- 5. Finance.
- 6. Agricultural indebtedness.
- 7. Fragmentation of holdings.

PART II

- 8. Irrigation.
- 9. Soils.
- 10. Fertilisers.
- 11. Crops.
- 12. Cultivation.
- 13. Crop protection.
- 14. Implements.

PART III

- 15. Veterinary.
- 16. Animal husbandry.

PART IV

- 17. Agricultural industries.
- 18. Agricultural labour.
- 19. Forests.
- 20. Marketing.
- 21. Tariffs and sea freights.
- 22. Co-operation.
- 23. General education.
- 24. Attracting capital.
- 25. Welfare of rural population.
- 26. Statistics.

QUESTIONNAIRE

PART I

1. Research.

- (a) Have you suggestions to advance for the better organisation, administration and financing of—
 - (i) All research affecting the welfare of the agriculturist, including research into the scientific value of the indigenous theory and traditional methods of agriculture,
 - (ii) Veterinary research ?
- (b) If in cases known to you progress is not being made because of the want of skilled workers, or field or laboratory facilities for study or by reason of any other handicaps, please give particulars. [Suggestions of a general kind should be made under (a); answers under this heading should relate to specific subjects. The purpose is to secure a list of the problems met with by scientific investigators in the course of their work which are being held over because of lack of resources or deficient organisation.]
- (c) Can you suggest any particular subject for research not at present being investigated to which attention might usefully be turned?

2. Agricultural Education.

With reference to any form of agricultural education of which you may have experience, please state your views on the following:—

- (i) Is the supply of teachers and institutions sufficient?
- (ii) Is there an urgent need for extension of teaching facilities in any district or districts known to you personally?
- (iii) Should teachers in rural areas be drawn from the agricultural classes?
- (iv) Are the attendances at existing institutions as numerous as you would expect in present circumstances; if not, state reasons. Can you suggest measures likely to stimulate the demand for instruction?
- (v) What are the main incentives which induce lads to study agriculture?
- (vi) Are pupils mainly drawn from the agricultural classes?
- (vii) Are there any modifications in existing courses of study which appear to be called for; if so, what are they?
- (viii) What are your views upon (a) nature study; (b) school plots; (c) school farms?
 - (ix) What are the careers of the majority of students who have studied agriculture?
 - (x) How can agriculture be made attractive to middle class youths?
- (xi) Are there recent movements for improving the technical knowledge of students who have studied agriculture?

(xii) How can adult education in rural tracts be popularised?

(xiii) In suggesting any scheme for better educational facilities in rural areas, please give your views for (a) its administration and (b) its finance.

3. Demonstration and Propaganda.

(a) What are the measures which in your view have been successful in influencing and improving the practice of cultivators?

(b) Can you make suggestions for increasing the effectiveness of field

demonstrations?

(c) Can you suggest methods whereby cultivators may be induced to

adopt expert advice ?

 (\bar{d}) If you are aware of any striking instances of the success or the failure of demonstration and propaganda work, please give particulars and indicate the reasons for success or for failure.

4. Administration.

- (a) Do you wish to suggest means towards the better co-ordination of the activities of the Governments in India or to indicate directions in which the Government of India may usefully supplement the activities of the local Governments?
- (b) Is it your opinion that the expert scientific knowledge required in the development of agriculture in the different Provinces could be supplied to a greater extent than is the case at present by increasing the scientific staff of the Government of India? If so, indicate the types of work which would benefit by pooling the services of experts, and suggest how that work should be controlled.
- (c) Are you satisfied from the agricultural standpoint with the services afforded by—
 - (i) The Agricultural and Veterinary Services,

(ii) Railways and steamers,

(iii) Roads,

(iv) Meteorological Department

(v) Posts, and

(vi) Telegraphs, including wireless?

If not, please indicate directions in which you think these Services might be improved or extended.

5. Finance.

- (a) What are your views as to the steps that should be taken for the better financing of agricultural operations and for the provision of short and long-term credit to cultivators?
- (b) Do you wish to suggest means whereby cultivators may be induced to make fuller use of the Government system of taccavi?

Agricultural Indebtedness.

(a) What in your opinion are:—

(i) the main causes of borrowing,

(ii) the sources of credit, and

(iii) the reasons preventing repayment.

(b) What measures in your opinion are necessary for lightening agriculture's burden of debt? For example, should special measures be taken to deal with rural insolvency, to enforce the application of the Usurious Loans Act, or to facilitate the redemption of mortgages?

(c) Should measures be taken to restrict or control the credit of cultivators such as limiting the right of mortgage and sale? Should

non-terminable mortgages be prohibited?

7. Fragmentation of Holdings.

(a) Do you wish to suggest means for reducing the loss in agricultural efficiency attendant upon the excessive subdivision of holdings?

(b) What are the obstacles in the way of consolidation and how can

they be overcome?

(c) Do you consider legislation to be necessary to deal with minors, widows with life interest, persons legally incapable, alienation and dissentients, and to keep disputes out of the courts?

PART II

8. Irrigation.

- (a) Name any district or districts in which you advocate the adoption of new irrigation schemes, of suggest extensions or improvements in the existing systems or methods of irrigation by—
 - (i) Perennial and non-perennial canals,
 - (ii) Tanks and ponds,

(iii) Wells.

What are the obstacles in your district or Province to the extension of irrigation by each of the above methods?

- (b) Are you satisfied with the existing methods of distributing canal water to cultivators? Describe the methods that have been employed to prevent wastage of water by evaporation and by absorption in the soil. What form of outlet for distribution to cultivators at the tail end do you regard as the most equitable and economical? Have these methods and devices been successful, or do you wish to suggest improvements?
- (N.B.—Irrigation charges are not within the terms of reference of the Commission, and should not be commented upon.)

Soils.

(a) Have you suggestions to make—

- (i) for the improvement of soils, whether by drainage or other means. not dealt with under other headings in this questionnaire.
- (ii) for the reclamation of Alkali (Usar) or other uncultivable land,
- (iii) for the prevention of the erosion of the surface soil by flood water?
- (b) Can you give instances of soils known to you which, within your recollection, have-
 - (i) undergone marked improvement,
 - (ii) suffered marked deterioration? If so, please give full particulars.

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(c) What measures should Government take to encourage the reclamation of areas of cultivable land which have gone out of cultivation?

10. Fertilisers.

- (a) In your opinion, could greater use be profitably made of natural manures or artificial fertilisers? If so, please indicate the directions in which you think improvement possible.
- (b) Can you suggest measures to prevent the fraudulent adulteration of fertilisers?
- (c) What methods would you employ to popularise new and improved fertilisers?
- (d) Mention any localities known to you in which a considerable increase in the use of manures has recently taken place.
- (e) Has effect of manuring with phosphates, nitrates, sulphate of ammonia, and potash manures been sufficiently investigated? If so, what is the result of such investigation?
- (f) What methods would you employ to discourage the practice of using cowdung as fuel?

11. Crops.

- (a) Please give your views on-
- (i) the improvement of existing crops,
 - (ii) the introduction of new crops including fodder crops,
 - (iii) the distribution of seeds,
 - (iv) the prevention of damage by wild animals.
- (b) Can you suggest any heavy yielding food crops in replacement of the present crops?
- (c) Any successful efforts in improving crops or substituting more profitable crops which have come under your own observation should be mentioned.

12. Cultivation.

Can you suggest improvements in-

- (i) the existing system of tillage, or
- (ii) the customary rotations or mixtures of the more important crops ?

13. Crop Protection, Internal and External.

Please give your views on-

- (i) The efficacy and sufficiency of existing measures for protection of crops from external infection, pests and diseases.
- (ii) The desirability of adopting internal measures against infection.

14. Implements.

- (a) Have you any suggestion for the improvement of existing, or the introduction of new, agricultural implements and machinery?
- (b) What steps do you think may usefully be taken to hasten the adoption by the cultivator of improved implements?

(c) Are there any difficulties which manufacturers have to contend with in the production of agricultural implements or their distribution for sale throughout the country? If so, can you suggest means by which these difficulties may be removed?

PART III

15. Veterinary.

- (a) Should the Civil Veterinary Department be under the Director of Agriculture or should it be independent?
- (b) (i) Are dispensaries under the control of Local (District) Boards? Does this system work well?
 - (ii) Is the need for expansion being adequately met?
 - (iii) Would you advocate the transfer of control to Provincial authority?
- (c) (i) Do agriculturists make full use of the veterinary dispensaries? If not, can you suggest improvements to remedy this?
 - (ii) Is full use made of touring dispensaries?
- (d) What are the obstacles met with in dealing with contagious diseases? Do you advocate legislation dealing with notification, segregation, disposal of diseased carcases, compulsory inoculation of contacts and prohibition of the movement of animals exposed to infection? Failing legislation, can you suggest other means of improving existing conditions?
- (e) Is there any difficulty in securing sufficient serum to meet the
- (f) What are the obstacles in the way of popularising preventive inoculation? Is any fee charged, and, if so, does this act as a deterrent?
- (g) Do you consider that the provision of further facilities for research into animal disease is desirable?

If so, do you advocate that such further facilities should take the form of-

- (i) an extension of the Muktesar Institute, or
- (ii) the setting up, or extension of, Provincial Veterinary Research Institutions?
- (h) Do you recommend that special investigations should be conducted by—
 - (i) officers of the Muktesar Institute, or
 - (ii) research officers in the Provinces?
- (i) Do you recommend the appointment of a Superior Veterinary Officer with the Government of India? What advantages do you expect would result from such an appointment?

16. Animal Husbandry.

- (a) Do you wish to make suggestions for—
 - (i) improving the breeds of livestock,
 - (ii) the betterment of the dairying industry,
 - (iii) improving existing practice in animal husbandry?

- (b) Comment on the following as causes of injury to cattle in your district—
 - (i) Overstocking of common pastures,
 - (ii) Absence of enclosed pastures, such as grass borders in tilled fields.
 - (iii) Insufficiency of dry fodder such as the straw of cereals or the stems and leaves of pulses,
 - (iv) Absence of green fodders in dry seasons,
 - (v) Absence of mineral constituents in fodder and feeding stuffs.
- (c) Please mention the months of the year in which fodder shortage is most marked in your district. For how many weeks does scarcity of fodder usually exist? After this period of scarcity ends how many weeks elapse before young growing cattle begin to thrive?
- (d) Can you suggest any practicable methods of improving or supplementing the fodder supply that would be applicable to your district?
- (e) How can landowners be induced to take a keener practical interest in these matters?

PART IV

17. Agricultural Industries.

- (a) Can you give any estimate of the number of days of work done by an average cultivator on his holding during the year? What does he do in the slack season?
- (b) Can you suggest means for encouraging the adoption of subsidiary industries? Can you suggest any new subsidiary industries to occupy the spare time of the family which could be established with Government aid?
- (c) What are the obstacles in the way of expansion of such industries as beekeeping, poultry rearing, fruit growing, sericulture, pisciculture, lac culture, rope making, basket making, etc.?
- (d) Do you think that Government should do more to establish industries connected with the preparation of agricultural produce for consumption, such as oil pressing, sugar making, cotton ginning, rice hulling, utilisation of wheat straw for card-board, utilisation of cotton seed for felt, fodder, oil and fuel, utilisation of rice straw for paper, etc.?
- (e) Could subsidiary employment be found by encouraging industrial concerns to move to rural areas? Can you suggest methods?
- (f) Do you recommend a more intensive study of each rural industry in its technical, commercial and financial aspects, with a view to, among other things, introduction of improved tools and appliances?
- (g) Can you suggest any other measures which might lead to greater rural employment?
- (h) Can you suggest means whereby the people could be induced to devote their spare time to improving the health conditions of their own environment?

18. Agricultural Labour.

- (a) What measures, if any, should be taken to attract agricultural labour from areas in which there is a surplus to—
 - (i) areas under cultivation in which there is a shortage of such labour?
- (ii) areas in which large tracts of cultivable land remain uncultivated? Please distinguish between suggestions designed to relieve seasonal unemployment and proposals for the permanent migration of agricultural population.
- (b) If there is any shortage of agricultural labour in your Province, what are the causes thereof and how could they be removed?
- (c) Can you suggest measures designed to facilitate the occupation and development, by surplus agricultural labour, of areas not at present under cultivation?

19. Forests.

- (a) Do you consider that forest lands as such are at present being put to their fullest use for agricultural purposes? For instance, are grazing facilities granted to the extent compatible with the proper preservation of forest areas? If not, state the changes or developments in current practice which you consider advisable.
- (b) Can you suggest means whereby the supply of firewood and fodder in rural areas may be increased?
- (c) Has deterioration of forests led to soil erosion? What remedies would you suggest for erosion and damage from floods?
- (d) Can you indicate any methods by which supply of moisture in the soil, the rainfall and supply of canal water can be increased and regulated by afforestation or by the increased protection of forests so as to benefit agriculture? Would the same methods be useful in preventing the destruction by erosion of agricultural land?
- (e) Is there an opening for schemes of afforestation in the neighbourhood of villages?
- (f) Are forests suffering deterioration from excessive grazing? Is soil erosion being thereby facilitated? Suggest remedies.

20. Marketing.

- (a) Do you consider existing market facilities to be satisfactory? Please specify and criticise the markets to which you refer, and make suggestions for their improvement.
- (b) Are you satisfied with the existing system of marketing and distribution? If not, please indicate the produce to which you refer and describe and criticise in detail the channels of marketing and distribution from the producer to the consumer in India (or exporter in the case of produce exported overseas). State the services rendered by each intermediary and whether such intermediary acts in the capacity of merchant or commission agent, and comment upon the efficiency of these services and the margins upon which such intermediaries operate. Please describe

the method by which each transaction is financed, or in the case of barter, by which an exchange is effected.

- (c) Do you wish to suggest steps whereby the quality, purity, grading or packing of agricultural produce may be improved, distinguishing where possible between produce destined for—
 - (i) Indian markets?
 - (ii) Export markets?
- (d) Do you think that more effective steps might be taken to place at the disposal of cultivators, merchants and traders information as to market conditions, whether Indian or overseas; crop returns; complaints as to Indian produce from wheresoever originating; and agricultural and marketing news in general?

21. Tariffs and Sea Freights.

Do existing (a) customs duties, both import and export, and (b) sea freights adversely affect the prosperity of the Indian cultivator? If so, have you any recommendations to make?

22. Co-operation.

- (a) What steps do you think should be taken to encourage the growth of the co-operative movement—
 - (i) by Government,
 - (ii) by non-official agencies?
 - (b) Have you any observations to make upon—
 - (i) Credit societies;
 - (ii) Purchase societies;
 - (iii) Societies formed for the sale of produce or stock;
 - (iv) Societies for effecting improvements—e.g., the digging of wells and the construction of bunds, walls and fences, or the planting of hedges;
 - (v) Societies formed for the aggregation of fragmented holdings and their redistribution in plots of reasonable size;
 - (vi) Societies for the co-operative use of agricultural machinery;
 - (vii) Societies for joint farming;
 - (viii) Cattle breeding societies;
 - (ix) Societies formed for any purpose connected with agriculture or with the betterment of village life, but not specified above?
- (c) Where co-operative schemes for joint improvement, such as co-operative irrigation or co-operative fencing or a co-operative consolidation of holdings scheme, cannot be given effect to owing to the unwillingness of a small minority to join, do you think legislation should be introduced in order to compel such persons to join for the common benefit of all?
- (d) Do you consider that those societies of which you have personal knowledge have, in the main, achieved their object?

23. General Education.

- (a) Do you wish to make observations upon existing systems of education in their bearing upon the agricultural efficiency of the people? If you make suggestions, please distinguish, as far as possible, between—
 - (i) Higher or collegiate,
 - (ii) Middle school, and
 - (iii) Elementary school education.
- (b) (i) Can you suggest any methods whereby rural education may improve the ability and culture of agriculturists of all grades while retaining their interest in the land?
 - (ii) What is your experience of compulsory education in rural areas?
- (iii) What is the explanation of the small proportion of boys in rural primary schools who pass through the fourth class?

24. Attracting Capital.

- (a) What steps are necessary in order to induce a larger number of men of capital and enterprise to take to agriculture?
- (b) What are the factors tending to discourage owners of agricultural land from carrying out improvements?

25. Welfare of Rural Population.

- (a) Outside the subjects enumerated above, have you any suggestions to offer for improving hygiene in rural areas and for the promotion of the general well-being and prosperity of the rural population?
- (b) Are you, for instance, in favour of Government conducting economic surveys in typical villages with a view to ascertaining the economic position of the cultivators? If so, what, in your opinion, should be the scope and methods of such enquiries?
- (c) If you have carried out anything in the nature of such intensive enquiry, please state the broad conclusions which you reached.

26. Statistics.

- (a) Do you wish to make suggestions for the extension or improvement of the existing methods of—
 - (i) ascertaining areas under cultivation and crops;
 - (ii) estimating the yield of agricultural produce;
 - (iii) enumerating livestock and implements;
 - (iv) collecting information on land tenure, the incidence of land revenue and the size of the agricultural population;
 - (v) arranging and publishing agricultural statistics ?
 - (b) Have you any other suggestions to make under this heading?

CONTENTS.

										PAGES
Terms of	Referen	ce	•••	•••	•••	•••	•••	•••	•••	iii
Question	naire	•••	•••	•••	•••	•••	•••	•••	•••	iv–xiii
Evidence	of									
1.	Sir Jose	ph Ka	у)							
2.	and Mr. B. C	Bur	٠ { ب	•••	•••	•••	•••	•••	•••	1–94
				Indiar	Cent	ral Cot	ton Co	mmitte	e.	
3.	Dr. Har	old M	ann		•••			•••		95-103
4.	Mr. V. I	. Mel	ıta							103-138
5.	Sir Lalu	bhai 8	Samald	as Meh	ta, Ki	., C.I.E				138-153
, 6.	Rao Bah	adur	Govin	dbhai F	I. Des	ai	•••			154-218
1 7.	Mr. G. K	. De	vadhar	•	•••		•••	•••		219-274
8.	Major C.		eck)							
9.	an Ensign I		. }	•••	•••	••••	•••	•••	•••	274-283
δ.				alvatio	n Arm	y Socia	l Worl	k, Bom	bay	
	-			Pre	sidenc	у.		•	•	
10.	Rao Sah		S. Shi	rahatti)					
11.	Mr. Kar	and mark	. F	•	}	•••	•••	***		283-311
12.	RaoSahe			Pursho	ttamd	as Desa	FR	rs m	T. C	312-337
13.	Rao Bah					'	.,			337-351
14.	Mr. L. K					•••	•••	•••	•••	001-001
	8.1	br		}						352-365
15.	Mr. N. V) :	•	71.1.3	m			
16.	Mr. S. D	-		_		Kirloska		ners, 1		000 005
10. 17.	Mr. B. R	_	-	•	_	•••	•••	•••	•••	366-385
18.	Mr. Step					•••	•••	•••	•••	385-400
19.	Mr. R. G				•••	•••	•••	•••	•••	401–415 415–431
20.	Mr. K. E		•		•••	****	•••	•••	•••	431-460
21.	Mr. N. R		_	,	•••	•••	•••		•••	460-476
22.	Mr. Nari				•••	•••		•••	•••	
23.	J. L. Gol					•••	•••	•••	•••	476-495 495-509
24.	Mr. J. K	•			•••	•••	•••	•••	•••	490009
44.		and	Luat	Į		•••				510-541
25.	Mr. Wale								•••	010 011
		repr	esentir	g the I	ndian	Merch	ants' C	hambe	r.	
Index	•••	•••		•••	•••	•••	•••			i-cxxiv
Glossary	•••	•••			•••	•••		•••	exx	v-cxxviii
62471										ь

(Figures in brackets refer to pages, other figures to questions.)

```
Administration:
        Agricultural Department, see that title.
       BOARD OF AGRICULTURE IN INDIA:
              Meetings:
                   Attendance of non-officials, value of, and increase desirable, Burt
                      (47).
       certain Unreality in proceedings, and reason for, Burt (46-47).

Larger and more representative Board, proposal for, Burt 48,516-20.

Popularisation of, and association of unofficial workers with, advocated, Sir L. S. Mehta (140).

Conferences between heads of Departments, proposal, Devadhar (238).
       Co-operation Department, see under Co-operation.
Co-ordination of effort on part of people and Government needed,
       Kembhavi (463).
Development Department, Baroda, particulars re, G. H. Desai 49,197-
           201.
       District Local Boards, see that title.
Forest Department, see under Forests.
Governor of each Presidency should be empowered to administer agri-
       culture in co-ordination with Local Governments, Kothawala (487). Interests of trade, industries, commerce and agriculture bound up together, Indian Merchants' Chamber, Bombay, (510).
       METEOROLOGICAL DEPARTMENT:
       Agricultural interests not attended to, Nagpurkar (368).

Joshis of more service to farmers than, Nagpurkar (368), 50,494-8.

Service not satisfactory, D. P. Desai (314).

Services not useful for agriculturists, Bhagwat (435).

Minister for Agriculture advocated, Nagpurkar (368); Bhagwat (436).
       Motor services, Surat district, Naik 50,210-5.

Motor transport, development desirable, Bhagwat (435).

Officers, more zealousness needed, Kembhavi (464).

Policy, criticism of, as affecting agriculturists, D. P. Desai (320).
       Political divisions unsuitable to agricultural conditions and each agricultural Province should be complete unit, Nagpurkar (367).
       Ports, need for increase, Devadhar (223).
       Posts:
               Extension and cheapening of facilities advocated, Bhagwat (436),
               Facilities satisfactory on the whole, Naik (338).
Service not satisfactory, D. P. Desai (314).
Village service, inadequate and extension advocated, Kothawala
                   (478).
       RAILWAYS:
               Agricultural demonstration train in Bengal and extension to other provinces advocated, Devadhar (222), 49,321-2.

Agricultural needs not provided for, Bhagwat (435).
               Classification of implements, complaint re, Kirloskar Brothers (355); Gurjar 50,286-7.
               Cotton traffic, suggestions for improvement, Shirhatti (293), 49,860-2.
                   49,891-7.
               Damage to agricultural produce from transhipment from one gauge
```

Administration-contd.

RAILWAYS-contd.

Export and import trade favoured as against agriculture, Nagpurkar (368), 50,451-2.

Facilities to cultivators by reduction of fares and good rates advocated, Kothawala (478).

Facilities not satisfactory, D. P. Desai (314).

Concessions:

to Agricultural labourers, advocated, D. P. Desai (314), (319). to Travelling salesmen of implement firms, advocated, Messrs.

Kirloskar Brothers (355); Gurjar 50,318-9.

special Facilities to agriculturists attending agricultural and co-operative conferences and exhibitions, advocated, Devadkar (2024), 40,514,21,40,605

(223-4), 49,514-21, 49,605.

Freight Rates:

Concessions to agricultural produce advocated, D. P. Desai (314), 50,096; Naik (338); Kothawala (478).

Implements:

Concession for long distances requested but refused, Gurjar 50,343-9, 50,386-8.

Special rates advocated, Kothawala (482).

Manures, reduction needed, Nagpurkar (370), 50,451-2;
Kirloskar Brothers (354), (355).

Market value of goods not considered in fixing, Kembhavi (468). on Milk and butter, lowering of, advocated, D. P. Desai (318). Purchases by Indian cotton mills should be facilitated by, Karmarkar (311).

Special, for Agricultural implements advocated, Kothawala

(482).

Increase, need for, Devadhar (223)
Pilfering and damage, Shirkatti (293).
Rolling stock should be increased, D. P. Desai (314); Naik (338).
Thefts, prevention advocated, D. P. Desai (314).

Transport facilities:

for Implements, need for improvement and proposals, Devadhar (230); Kirloskar Brothers (354-5); Gurjar 50,329-31, 50,361. proposed Improvements for dairy industry, D. P. Desai (318). Transport of raw material for agricultural implements, need for facilities and proposals, Messrs. Kirloskar Brothers (352-3). Revenue Department, see under Land Revenue.

Bad condition, Naik 50,204-9.

Canal, opening of, to public advocated and small toll would not be objected to, Walchard Hirachard 51,825-9, 51,891-8, 51,995-2000, 52,078-9.

Extension, proposal for, Bhagwat (435), (442).
Improvement advocated, D. P. Desai 50,098-101.
Improvement and increase necessary for marketing, Naik (338).

Inadequate and unsatisfactory, Bhagwat (435).
in Interior, bad condition and need for improvement, Devadhar

(224).not Satisfactory, D. P. Desai (314).

Village:

Bad conditions and local fund should be expended on improve-

ment, Kothawala (478).
Improvement advocated, Kothawala (484), (485).
Improvement round Hubli by District Board, by grant of 2 per cent. from municipal cess on cotton, question of, Shirhatti (293), 49,863-6.

Shipping conferences, Fotiadi 50,970.

Administration—contd.

STEAMSHIP COMPANIES

Agriculture should receive special concessions, Naik (338). Special facilities to agriculturists attending agricultural and co-operative conferences advocated, Devadhar (223).

Extension and cheapening of facilities advocated, Bhagwat (436), (442).

Irrigation Department, opening of, to public advocated, Walchand Hirachand 51,825, 51,830.
Service not satisfactory, D. P. Desai (314).

Telephones, Irrigation Department, opening of, to public advocated, Walchand Hirachand, 51,825, 51,830.

Agricultural Department:

Administration of irrigation by, advocated, Bhagwat (438), 51,323-4; Kothawala (488); Indian Merchants' Chamber, Bombay (512); Walchand Hirachand 51,811-6, 52,114-7, 52,136-9.

Advice sometimes not available owing to exhaustion of travelling allowance grant, Walchand Hirachand 51,848.

small Advisory Committees, proposal for, Bhagwat (436), (448).

Should be Autonomous, Bhagwat (435).

Control of Civil Veterinary Department by, see under Veterinary.

Control of Dispensaries by, see under Veterinary.

no Co-operation between Civil Veterinary Department and, D. P. Desai (317).

greater Co-operation with Co-operative Department, need for, Devadhar (223), 49,323-4.

DIRECTOR OF AGRICULTURE:

Control of Civil Veterinary Department, see under Veterinary. Highly qualified expert with missionary spirit advocated, Bhagwat (436), (448), 51,322.

District reports should be issued by, Gordon (416), 51,154, 51,161.

Engineering section, trained "Fieldmen" available for demonstration and propaganda work advocated, Goheen (500).

increased Expenditure on, needed, D. P. Desai 50,077-8, 50,081.

Extension, proposals for, Bhagwat (436).

some Good done by, but not as much as expected of it, Naik (338).

Meetings between officers of, extensions advocated, Sir L. S. Mehta (140). (140).

SERVICE:

not Satisfactory, D. P. Desai (314).
not in Tune with agriculturists, Nagpurkar (367), 50,583-6.

Non-officials, little attention paid by, to department and to agriculturists until recently, Sir L. S. Mehta 48,953-4.

Relations of Bombay Provincial Bank with, V. L. Mehta 48,784.

Relations with Kirloskar Brothers, Gurjar 50,356-60, 50,396-401.

Increase advocated, D. P. Desai 50,077; Bhagwat (435); Kothawala

Subordinate, greater travelling facilities advocated, Devadhar

(223).

closer Touch with Revenue Department advocated, Gordon (416).

Valuable work being done by, but financial resources and staff inadequate for work waiting to be done, Burt (48-9), 48,544-6.

Agricultural Indebtedness:
Banias, rates charged by, Kothawala 51,596-7.
Causes of, V. L. Mehta (106), 48,734-43, 48,822-5, 48,877-80, 48,903-4, 48,934; Sir L. S. Mehta (141); G. H. Desai (160), (196); Devadhar (225-6), 49,375-6, 49,418-41; Peck (275); D. P. Desai (314-5); Naik (338); Nagpurkar (368-9); Gordon (416); Bhagwat (431), (436), (437), 51,307-9; Kembhavi (464); Kothawala (478), (487); Indian Merchants' Chamber, Bombay (511).

```
Agricultural Indebtedness-contd.
            Change in old-time rural economy as factor in connection with, V. L.
            Mehta (106), (107), 48,875-6.
Compound interest should be done away with, Kembhavi (464), 51,512-4.
Compounding of portion of debt by sowcars, proposal, V. L. Mehta
                  (108).
            CREDIT:
                        Restriction or control:
                        Advocated, Peck (275).

not Advocated, Naik (338); Kembhavi (464); Kothawala (478).

Sources of, V. L. Mehta (107), 48,744-5; G. H. Desai (160); Devadhar (226); Peck (275); Naik (338); Gordon (416); Bhagwat (437); Kembhavi (464); Kothawala (478), (487).
          DECCAN AGRICULTURISTS' RELIEF ACT:

Extension to all districts advocated, Devadhar 49,589-91.
Results, Naik 50,271-6; Kembhavi (464).

Value of, in lightening burdening of debt and propaganda to make provisions better known among agriculturists advocated, Devadhar (226), 49,326-7, 49,549-50.

Disposal of produce to sowcars at low price in some cases, Walchand Hirachand 51,833-6.

Emigration to British Colonies chould be accounted to the content of the colonies chould be accounted to the coloni
          Emigration to British Colonies should be arranged for, Naik (338). Expenditure on social functions and religious ceremonies and love of jewellery, mainly among better class people, Devadhar (226), 49,526-31,
                  49,544-5.
           Improvement of return from agriculture the only remedy, Indian Mer-
          amprovement of return from agriculture the only remedy, Indian Merchants' Chamber, Bombay (511).

Incurring of debt in order to pay Government dues, V. L. Mehta 48,877-80; Naik 50,249, 50,252-3, 50,265-7.

Insolvency proceedings, objection to, Naik (338), 50,270-6.

Means of lightening burden of debt, V. L. Mehta (107-8); Sir L. S. Mehta (141); Devadhar (226); D. P. Desai (315); Kothawala (478),
           no Measures possible until agriculture put on sound economic basis,
                 Bhagwat (437).
           Moneylenders:
                      Advances from, Kabulis, rate of interest charged, etc., Devadhar (226), 49,442-4.

Advantages of system to cultivators, G. H. Desai (161).
                       Borrowing both from co-operative societies and, Indian Central Cotton Committee (28); G. H. Desai (191).

Drawbacks of, Devadhar (224).
                        Effect of co-operative movement on, V. L. Mehta (114).
                        Evil of system, G. H. Desai (159).
                        Exorbitant interest by, enforcement of law prohibiting, advocated,
                              Peck (275).
                       Keeping of accounts and giving of receipts, proposal, G. H. Desai (161), 49,043, 49,113.
                      (161), 49,040, 43,110.
Licensing of, proposal, G. H. Desai (161), 49,040-2, 49,224-8, 49,113.
Pathan, V. L. Mehta (107), 48,744-5.
Preferred by cultivators to taccavi loans and reasons, G. H. Desai
                              (159-60).
                      Restrictions on, proposal, G. H. Desai (161), 49,040-3, 49,223-8, 49,072.
          MORTGAGE AND SALE:
                      Redemption, facilities for, Devadhar (226).
Restriction of right:
Advocated, Peck (275).
                                   not Advocated, Kembhavi (464); Kothawala (478-9), (487). in Backward etc. areas, might be desirable, Devadhar (226),
                                          49,592-3.
                                     under Bombay system, but general application undesirable,
                                   Gordon (416).
should be Confined to backward etc. areas, Sir L. S. Mehta
```

Rates of interest, Indian Merchants' Chamber, Bombay (511).

(141).

```
Agricultural Indebtedness—contd.
         REDEMPTION OF DEST:
                  through Co-operative societies, V. L. Mehia 48,723-7, 48,815-7, 48,933.
        Essential for agricultural improvement, Naik 50,249.
Operations of Nagpur Ideal Insurance Company, Ransing 50,725-7.
Proposal, V. L. Mehta (108), 48,818-21.
Steps being taken for, in Khandesh, Ransing 50,724.

Redemption of land, shortening of procedure needed, Kothawala (478).
        Relief of, only possible by making agriculture profitable, Nagpurkar (369).
Repayment, reasons preventing, V. L. Mehta (107); G. H. Desai (161);
Devadhar (226); Peck (275); Naik (338); Nagpurkar (369); Gordon (416); Bhagwat (437); Kembhavi (464); Kothawala (478), (487); Indian Merchants' Chamber, Bombay (511).
        Rural insolvency, special measures not necessary, Devadhar (226).

Sowcars, assistance to agriculturists and to Government, Naik 50,249.

Unprofitable nature of agriculture, Indian Merchants' Chamber, Bombay
             (510); Walchand Hirachand 51,938-40, 52,119-33.
         USURIOUS LOANS ACT:
                 not Desirable, Naik (338).
                 Enforcement:
                         not Advocated, harm would be done by, Kembhavi (464). not Necessary, Kothawala (478).
Agricultural Industries:
        in Baroda, and measures taken by Government, G. H. Desai (186).
        BEE-KEEPING:
                 Possibilities of, Goheen (501).
                 not found Practicable in Gujarat, G. H. Desai (186).
Proposed, Kembhavi (468).
                 Religious sentiment an obstacle, Devadhar (231).
Special climate required, Indian Merchants' Chamber, Bombay (512)
        Bombay Provincial Bank memorandum, general agreement with, Sir L. S. Mehta (142).
        Cardboard making, investigation advocated, D. P. Desai (319).
        CARTING:
       a Bye industry, but decline owing to introduction of railways and motor lorries, Nagpurkar (372).
during Spare time, V. L. Mehta (109), Bhagwat 51,367-77, 51,397-403.
Cattle breeding on small scale, suitability of, but Government assistance
            needed, Nagpurkar (372).
        Cloth manufacture, proposal, V. L. Mehta (109-10).
Competition with foreign products, difficulty, Bhagwat 51,246-9.
Co-operative organisation, proposal, V. L. Mehta (110); G. H. Desai
             49,286.
        Cottage industry suitable to particular tract should be introduced, D. P. Desai (319).
         Cotton ginning, see that title.
       Cotton ginning, see that title.
Cotton seed, utilisation of, position re, and prospects, etc., Indian Central Cotton Committee (14-15); G. H. Desai (187).

Dairying, see under Animal Husbandry.
Danger of distracting attention from agriculture, Rhagwat (431-2).
Desirable, Gordon (417).

Details of work during cultivation season in dry tracts, and occupation during slack season, Bhagwat (441-2), 51,361-7.

Facilities for transport and communication advocated, Bhagwat (442).
Factories for utilisation of bye-products, desirable, D. P. Desai (319).
Fruit-canning, etc. personal experience, Walchand Hirachand 52,066-7.
Fruit-growing, see that title.
Mr. Gandhi's movement, question as to possibilities, Goheen 51,775-6.
         Mr. Gandhi's movement, question as to possibilities, Goheen 51,775-6.
        Home Industries Association:
Bengal, V. L. Mehta 48,914-6.
Proposal, V. L. Mehta (110), 48,914-6.
        Home Industries:
                 Preferable to factories, D. P. Desai (319).
                 for Upperclass women, proposal for development of, G. H. Desai
                     (187).
        Importance of encouraging, Peck 46,689-90.
```

Indigenous fruits of Gujarat and scope for development, G. H. Desai

Agricultural Industries—contd.

(186-7).

```
INDUSTRIAL CONCERNS, REMOVAL TO RUBAL AREAS:
           Advocated, Bhagwat (442).
           Co-operative running of, desirable, G. H. Desai (187); Devadhar
              (232).
  Desirable, Naik (340).
not Desirable, D. P. Desai (319).
Intensive study of rural industries advocated, Devadhar (232); D. P. Desai (319); Nagpurkar (372); Bhagwat (442); Goheen (502).
   LAC CULTURE:
  Extension, proposed means, G. H. Desai (186).
by Forest tribes in Navsari district, G. H. Desai (186).
Machinery and factory production, obstacles in way of development,
       Kembhavi (468).
  Nature of, in Gujarat, G. H. Desai (185).

not Necessary if productive capacity of agriculture can be increased,
V. L. Mehta 48,749.
  Need for, Sir L. S. Mehta 48,985-6; D. P. Desai (318), 49,283-6;
Devadhar 49,572; Nagpurkar 50,534-5.
Obstacles in way of development, Devadhar (231); Naik (340); Goheen
  as Occupation for slack seasons, difficulties in connection with, Bhagwat
      (442), 51,246-9.
  Oil pressing, see that title.
  Organisation under central control of village authority advocated, Peck
       (276), 49,660.
  Pisciculture, no scope for, in Gujarat, G. H. Desai (186).
  POULTRY REARING:
         Appliances, remission of customs duty advocated, Goheen (500). Baroda, position, G. H. Desai (186).
         Foreign markets needed for great development of, Kembhavi (468).

Obstacles in way of development, Kembhavi (468).

Position re, V. L. Mehta (109).

Possibilities of, Goheen (501).

Proposal, Peck (276).
 Religious sentiment and obstacles, Devadhar (231).
Research, need for, Goheen (495), 51,727.
Suitability of, Nagpurkar (372).
Work of Sangli Agricultural and Industrial School re, Goheen (501).
Power industries, in Gujarat, G. H. Desai (187).
 PREPARATION OF AGRICULTURAL PRODUCE FOR CONSUMPTION:
Government should investigate, G. H. Desai (187); Naik (340);
             Bhagwat (442).
 Possibilities and requirements for success, V. L. Mehta (110).

Propaganda and demonstration work needed, Goheen (501).

Proposals, Devadhar (231-2), 49,570-80; Peck (276); Bhagwat (442), 51,856-60; Goheen (501), 51,774-9; Indian Merchants Chamber,
     51,356-60; Gol
Bombay (512).
 Regional surveys of rural crops and industries, proposal, Sir L. S.
     Mehta (142).
Religious sentiments, obstacle of, G. H. Desai (185), 49,055.
Requirements for establishment, Devadhar (231).
Revival of, a means of lightening burden of debt, V. L. Mehta (107).
Rice hulling in Gujarat, G. H. Desai (187).
 ROPE MAKING:
        Possibilities of, Goheen 51,777-8.
        Proposal, Gohecn (501-2).
 SERICULTURE:
        Baroda, attempted encouragement by Government, G. H. Desai (186). Special climate required, Indian Merchants' Chamber, Bombay
            (512).
                                                            vi
62471
                                                                                                                       8 2
```

Agricultural Industries—contd.

WEAVING AND SPINNING: on Caste prejudice against weaving known of, J. K. Mehta 51,914-8. on Co-operative basis, proposal, Peck (276), 49,647-9, 49,678-96. Disorganisation of, and bad results, Kembhavi (467). Encouragement, desirability of, Kembhavi (467-8) Government inspectors, good done by, Peck 49,692-4.
Hand-weaving by Mahars in Khandesh, Ransing 50,790-4.
Introduction by All-India Spinners' Association in certain districts,
V. L. Mehta 48,746-9. V. L. Mehta 48,746-9.

Mill yarn v. handspun yarn, J. K. Mehta 52,022-41.

Particulars re, and prospects, Ransing 50,787-97.

Possibilities of, and proposals for development of spinning as All-Indian subsidiary industry, Indian Merchants' Chamber, Bombay (512); J. K. Mehta 51,818-20, 51,908-19; 51,949-54, 52,010-52, 52,092, 52,139-42; Walchand Hirachand 52,089-91.

Professional weavers, J. K. Mehta, 51,911-2, 51,196-7, 52,021.

Proposal for encouragement of, V. L. Mehta (110), 48,832-45.

Suggested, D. P. Desai (319); Naik (340).

most Suitable subsidiary cottage industry, Nagpurkar (372), 50,532-6.

Training in schools. advocated, Kothawala (488); J. K. Mehta Training in schools, advocated, Kothawala (488); J. K. Mehta 52,143. Weaving, not possible as part time occupation, J. K. Mehta 51,911-4, 52,017-21. Weaving school, Khandesh district, Ransing 50,796-7. Weaving societies, V. L. Mehta 48,832-4.

Straw, utilization of, proposal, G. H. Desai (187); D. P. Desai (319). Time spent by cultivators on holdings and occupation in slack seasons, V. L. Mehta (109); G. H. Desai (185); Devadhar (231); Peck (276); D. P. Desai (318-9); Naik (339-40); Nagpurkar (372); Kothawala (488); Goheen (501). Vegetable growing in Gujarat, and scope for development, G. H. Desai (186-7).

Agricultural Labour:

Advances to, free of interest in certain cases, Walchand Hirachand 52,062-4.

Annual migration from Ratnagiri and Kaira districts to Broach and other districts, Gordon (417), 51,079-81, 51,092.

Attraction to areas where shortage or to uncultivated land, proposed means, G. H. Desai (187), (188); Devadhar (232); Peck (276), 49,616-7, 49,675-7; D. P. Desai (319); Naik (340); Kembhavi (468); Kothawala (484), (488).

Colonisation of areas under Sukkur Barrage scheme, provision of land for poor cultivators and labourers advocated and scheme for working of, by co-operative societies, *Devadhar* (233), 49,408-12, 49,532-5.

Concessions in railway rates to agricultural labourers advocated to encourage migration, D. P. Desai (319).

Development of uncultivated areas, proposals for, Devadhar (233).

Dry tracts, introduction of small reaping machinery suitable for bullock power advocated, Bhagwat (442).

Importation necessary, Naik (340), 50,162-5.

Land development schemes entailing migration of, must be undertaken by capitalists or Government, Nagpurkar (372).

Migration, permanent, would be difficult to induce, G. H. Desai (187), 49,298-9.

Shortage and causes, G. H. Desai (180-187), (193); Devadhar (232); Naik (340); Kothawala (484), (489).

Shortage in cultivating season and surplus in slack season in Bijapur district, Gordon (417), 51,003-5, 51,092-3.

Slack seasons, work during, Bhagwat 51,274-5.
Travelling charges for, lowering of, advocated, D. P. Desai (314).

Agricultural Labour—contd.

Uncultivated areas, starting of bunding and land improvement advocated, Kembhavi (468).
Unskilled labourer, position improved, G. H. Desai 49,090.

Agriculture a losing concern in the Deccan, Nagpurkar 50,613-7.

Alienation of Land Act, Punjab, cleavage between agricultural and urban population created by, Devadhar 49,551-3.

Animal Husbandry:

BUFFALORS:

for Dairying industry, see that title below.

Feeding of, G. H. Desai (184).

Keeping of, would be profitable, and proposals for encouraging,

Devadhar 49,573-80. Prejudice against use of, for agricultural purposes, G. H. Desai

Bullocks:

(183).

Area that can be cultivated by pair of, Gordon 51,098-106, 51,108-9. Compulsory castration before certain age, advocated, Bhagwat (440), 51,283-6.

Cost of keeping, increase in, Gordon 51,135-6. Feeding of, G. H. Desai (184).

Local demand for, Kothawala 51,643-6.

BULLS:

Castration:

Compulsory, of bulls not required for healthy breeding advocated, Nagpurkar (372).

Mechanical, popular at Bijapur and propaganda needed in other parts, Gordon (416), 51,086-9.

Secret carrying out of, in Baroda, G. H. Desai 49,080-1,

49,085. considered a Sin by people, and propaganda re, G. H. Desai (183), 49,081, 49,086.

Let loose as act of merit, damage done by, and castration advocated, G. H. Desai (177), (183), 49,080-6. Non-Castration, Kothawala (482), 51,657-60.

Non-Castration, Kothawala (482), 51,657-60. Price, increase above pre-war, Kothawala 41,668-70.

CATTLE-BREEDING:

Co-operative societies, see under Co-operation.
not Profitable to cultivator owing to fodder difficulty, Nagpurkar 50,543-55a.

by Roaming tribe of Mahommedan Sindhis, Kothawala (483)

on Small scale, suitability of, as subsidiary industry, but Government assistance with capital needed, Nagpurkar (372). Unprofitable now no longer demand for export, Kothawala (482-3),

51,620-2, 51,646. by Villagers, gra Devadhar (231). grants of land for maintenance would encourage,

DAIRYING INDUSTRY:

Betterment:

Necessary, Naik (339); Kothawala (483). Proposals for, G. H. Desai (183); Devadhar (231).

Buffaloes

Breeding for milk should be undertaken, D. P. Desai 50,043. Popularity of milk, Devadhar 49,573-6. as Satisfactory as cows, D. P. Desai 50,043.

Butter:

Foreign, prohibition of import advocated, D. P. Desai (318).

Higher butter fat percentage desirable, D. P. Desai 49,957.

Casein products, starting of factories advocated, D. P. Desai (318).

Animal Husbandry-contd.

DAIRYING INDUSTRY-contd.

Central instruction advocated, Devadhar 49,509-13.
Conditions in Gujarat, G. H. Desai (183), (186).
Co-operative creameries would be useful, G. H. Desai (183).
Cream-separators, establishment in villages, G. H. Desai (183),

(186), 49,056-7.

Development by municipal or co-operative societies, advocated, Devadhar (231).

Development, scope for, D. P. Desai (318), 49,956.
not a Farmers' industry, Nagpurkar (372).
Ghi, importation, prohibition advocated, D. P. Desai (318), 49,957.
with Goats, proposed development of, Goheen (500-1), 51,715-20.
High quality milk and milk products, demand for, D. P. Desai 49,956.

Improvement of breed of milch animal necessary, Bhagwat (440).

Buffalo, see under Buffaloes above.

Importance of supply of pure and cheap, and products,

Devadhar (231).

Obstacles to development, Devadhar (231); D. P. Desai 50,045-8.

Railway rates on milk and butter, lowering of, advocated, D. P. Desai (318).

Railway transport facilities, proposed improvements, D. P. Desai

(318).

Requirements for success, V. L. Mehta (109).

not Suitable for all parts of the country, Indian Merchants' (hamber, Bombay (512).

Village co-operative societies needed, G. H. Desai 49,055.

Wasteful methods, G. H. Desai 49,055.

Decrease in number of cattle, Ransing 50,680-3; Gordon 51,099.

Deterioration of cattle, Nagpurkar (371), 50,547, 50,554.

Dual purpose animals, Gujarat breed suitable, Kothawala 51,642, 51,650. Export of cattle, former trade, Kothawala 51,630-8.

FODDER:

Common pasture, increase advocated, Naik (339).

Conditions in district, Naik (339).

Co-operative fodder-storage societies advocated, Devadhar (231).

Crops:

Lucerne, growing of, G. H. Desai (185). Nature of, G. H. Desai 49,039.

Need for introduction of, Goheen (498).

Replacement by commercial crops, G. H. Desai 49,038. Dry, absence of, in dry season, Kothawala (483). Famine reserve, Sir L. S. Mehta 49,015.

Grass depots at each taluka headquarters advocated, Kothawala

Grass reserves, organisation of co-operative societies for creation of in Baroda, G. H. Desai (184).

Green:

Deep rooted species of juar, investigation advocated, D. P. Desai (318).

Growing of leguminous fodders, proposal, G. H. Desai (185). Possibility of utilisation of leaves of some trees should be enquired into, Bhagwat (440).

Increase of area under fodder crops advocated, Nagpurkar (372). Irrigation facilities needed, D. P. Desai (318), 50,050. Preservation of grass lands and removal of vexatious restrictions of forest laws advocated, Nagpurkar (372). Problem of, G. H. Desai 49,038.

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Animal Husbandry-contd.
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```
FODDER-contd.
```

Shortage, periods of, and causes, G. H. Desai (185); D. P. Desai (318); Naik (339); Bhagwat (440); Kothawala (483), (488).

Silage:

Cheap method needed, D. P. Desai (318), 49964. Co-operative system, proposal, Goheen (498), (501), 51,764-9. Desirable, Kothawala (483).

Tailure to persuade cultivators to adopt, G. H. Desai (158), (184), 49,038-9, 49,280-2.

Increased use of, need for, Goheen (501), 51,762-3.
on Sangli Industrial and Agricultural School farm, Goheen (501).

not Taken to easily by cultivators, Kothawala (483), 51,624-5. Sowing of mal lands with suitable grasses, proposal, Bhagwat 51,343-5.

Stacking of, position re, and decrease, G. H. Desai (184), 49,280. Storing, need for improved methods of, G. H. Desai (185). Supply, G. H. Desai (184); Kothawala (483).

of Grass from forest, proposal, Bhagwat (440).
Varieties used, G. H. Desai (184-5).
decreased Yield, D. P. Desai (318), 49,959.
Goat breeding, Goheen 51,715-9, 51,738-42.

Deccan, position re, Nagpurkar 50,546-53. Enclosed pastures:

Absence of, Kothawala (483).

Effect of quality of cattle, Gordon, 51,035-6.

in Forests, see that title.

Gaocharan lands, system in Baroda, G. H. Desai 49,178-80.

Gauchars (village commons), certain drawbacks of, but need for,

G. H. Desai (183-4), 49,273-5.

Grass borders in tilled fields:

Decreasing and remission of assessment on, proposed, D. P. Desai (318).

Disappearing, Bhagwat (440).

Grounds, lack of, Kothawala 51,653-6. Overstocking of common pastures, Bhagwat (440); Kothawala (483).

Deterioration in grazing value, D. P. Desai (318).
Reserved for Military or Forest Department, should be thrown open to public, Bhagwat (440-1).

88, Kothawala 51,654.

Rates, Kothawala 51,654.

more Waste lands for, advocated, in villages, Kothawala (488).

Gujarat, high level of efficiency, D. P. Desai (318).

IMPROVEMENT OF BREEDS:

Advocated, by selection and cross-breeding with foreign types, D. P. Desai (318).

Baroda, steps taken in, G. H. Desai (182), 49,181-4, 49,216-21.

Control of all breeding by Veterinary Department necessary,

Bhagwat (440).

Distribution of bulls, good results obtained, Devadhar (230-1).

Lines on which required, Devadhar (231).

proposed Means, Nagpurkar (371-2).

Necessary, Naik (339).

and should be Carried on by Veterinary Department, with special attention to requirements of various localities,

Rhamont (MO). Bhagwat (440).

Proposals for, Kothawala 51,623, 51,647-50.
Provision of sires by Government, proposal, G. H. Desai (182) Provision for, in each village, proposal, Kothawala (486), (488). Scope for, G. H. Desai (183).

```
Animal Husbandry-contd.
```

IMPROVEMENT OF BREEDS-contd.

Small dairy herds in each homogeneous tract, proposal, D. P. Desai

Improvement of cattle:

Needed for introduction of larger or better implements, G. H. Desai (180).

of Draught and milch cattle, need for, Nagpurkar (371); Kothawala

Improvement of practice needed, Naik (339).
Increasing interest of landowners, propaganda and demonstration advocated, Naik (339).

no Interest shown by zamindars and big landholders and proposed means of encouraging, G. H. Desai (183).

Kankrej breed, purpose of, Kothawala 51,641-2.

Mixture of Kankrej and Gujarat breeds good for milking and draught purposes, Kothawala 51,637. Number and quality of cattle, need for increase, Nagpurkar (367).

50,480-5.

Pinjrapoles, G. H. Desai 49,081.

Price of cattle, increase since war, Ransing 50,682-6. Pure breeds, absence of, in Gujarat, G. H. Desai (182). Quality of cattle in Gujarat, Gordon 51,034-6.

Salt in ration, necessity for, Kothawala (483).

SHEEP BREEDING:

Encouragement, need for, and proposals, Nagpurkar (370), (372). Proposal, Goheen 51,777.

Bairi, see under Crops.

Bee keeping, see under Agricultural Industries.

BHAGWAT, K. B., on behalf of the Irrigators' Central Committee, Deccan Canals: (431-448), 51,188-51,409

Administration:

Meteorological Department, services not useful for agriculturists, (435).

Minister for Agriculture, advocated, (436).

Motor transport, development desirable, (435).
Posts, extension and cheapening of facilities advocated, (436).
Railways, agricultural needs not provided for, (435).

Roads:

Extension, proposal for, (435).
Inadequate and unsatisfactory, (435).
Telegraphs, extension and cheapening of facilities advocated, (436).

AGRICULTURAL DEPARTMENT:

small Advisory Committees, proposal for, (436), (448). should be Autonomous, (435). Director of Agriculture, highly qualified expert with missionary spirit advocated, (436), (448), 51,322. Extension, proposals for, (436). Increase advocated, (435).

AGRICULTURAL INDEBTEDNESS:
Causes of, (431), (436), (437), 51,307-9.
Credit, sources of, (437).

no Measures possible until agriculture put on sound economic basis,

Repayment, reasons preventing, (437).

ACRICULTURAL INDUSTRIES:

Carting during spare time, 51,367-77, 51,397-403.

BHAGWAT, K. B .- contd.

AGRICULTURAL INDUSTRIES-contd.

Competition with foreign products, difficulty, 51,246-9. Danger of distracting attention from agriculture, (431-2).

Details of work during cultivation season in dry tracts, and occupation during slack season, (441-2), 51,274-5, 51,361-7.

Facilities for transport and communication advocated, (442).

Industrial concerns, removal to rural areas, advocated, (442). Intensive study of rural industries advocated (442).

as Occupation for slack sensons, difficulties in connection with,

(442), 51,246-9. Preparation of agricultural produce for consumption, Government should investigate, (442). Proposals, (442), 51,356-60.

AGRICULTURAL LABOUR, dry tracts, introduction of small reaping machinery suitable for bullock power advocated, (442).

ANIMAL HUSBANDRY:

Compulsory castration of work cattle before certain age, advocated, (440), 51,283-6.

Dairy industry, improvement of milch breeds necessary, (440). Fodder:

Pastures reserved for Military or Forest Department, enquiry

proposed, (440).

Shortage, and period of, (440). Sowing of mal lands with suitable grasses, proposal, 51,343-5.

Supply of grass from forest, proposal. (440). Grazing:

Grass borders in tilled fields, disappearing, (440).

Overstocking of common pastures, (440).

Pastures reserved for Military or Forest Department, should be thrown open to public, (440-1).

Improvement of breeds necessary, and breeding should be controlled by Veterinary Department, with special attention to requirements of various localities, (440).

CAPITAL, objection to carrying on of agriculture by big capitalists employing labour, (446).

Co-operation:

Joint improvement schemes, compulsion on minority to join in, great care would be necessary, (445).

Condition of movement, (444), 51,264-73.

Credit societies, control by joint board consisting of Director of Agriculture, Registrar of Societies and a few non-officials, (445).

CROPS:

Cereals, research advocated, (432). Damage by wild animals, proposed means of preventing, (439),

51,280-2. Grape-vines, spraying of, (435).

Grasses, improvement, research advocated, (432), 51,339-46. Improvement, research advocated, (438), (439). Introduction of new varieties, research advocated, (438). Oats, introduction proposed, (439).

Potatoes:

Seed, source of, 51,259. Storage, 51,261-3.

Rice, Kolumba variety, introduction by Karjat farm, (439).

BHAGWAT, K. B .- contd.

CROPS-contd.

Seeds, distribution by Government farms advocated until seed agencies established, (439).

Smut, use of copper sulphate as preventive of, non-adoption by cultivators, but smut not a great problem, (435), 51,234-40. Sugarcane:

Ammonium sulphate, use of, in canal areas, (438).

H.M. 544, introduction, (439). Wide planting, introduction of (435).

Wheat, Pusa 4, introduction of, (439).

CULTIVATION:

Dry:
Intensive study and propaganda advocated, (432), 51,328-38.
Uneconomic nature of, a cause of agricultural indebtedness, (431), (436), (437).
Dry farming areas, cultivators have less heart and energy in work,

51,393-6.

DEMONSTRATION AND PROPAGANDA:

Expert advice, means for inducing adoption of, (435). Success, examples of, (434-5).

EDUCATION:

Agricultural:

Demand for, greater in irrigated than in dry areas, 51,207-10. present Facilities, (432-3).

Loni School, appreciated by people owing to scholarships, 51,382-4.

Proposals, (433), (434), (445-6). Requirements in irrigated and dry areas, (433), 51,228-33. Schools:

Attendances insufficient, (433).

Objection to, (445).

Short courses and value of, (433), (434), 51,224-7.

Students, after-careers, (433).

Agricultural bias schools, (433).

Demand for, greater in irrigated than in dry areas, 51,207-10.

Illiteracy, difficulties caused by, (431).

Interest in agriculture and industry destroyed by present system, (445).

Interest in agriculture and industry (445).

Literacy, increase in proportion, 51,211.

Primary, reason for small proportion of boys passing through fourth class, (447).

Scheme, (434), (445-6), (447), 51,404-5.

System, 51,276-7.

Technical, proposal, (433-4), (442), (445-6), 51,385-8.

FERTILISERS:

Adulteration, means of preventing, provision for speedy analysis of samples and legislation, (438).

Ammonium sulphate:

no Propaganda needed in canal areas, 51,310.
Use of, for sugarcane in canal areas, (438).
Artificial, use should be encouraged as supplementary to natural manures, (438).

Cowdung, use as fuel, proposed means of preventing, (438). Phosphates and potash, experiments in the Deccan not successful but more investigation necessary, (438). Popularisation of, proposed means, (438).

Co-operative credit the best method, (446). Long term credit, co-operative societies should be authorised to give, or land banks be introduced, (436).

BHAGWAT, K. B .- contd.

FINANCE-contd.

Taccavi loans:

Administration of, by revenue officer appointed on special duty in each district, proposal, (436). Delay and corruption, (436).

FORESTS:

Agriculturists' interests not properly co-ordinated with forest

interests, (443).
Coupes, for first 10 years grass should be allowed to be cut only by

villagers round about, (443). Cultivable lands in dry tracts should no longer be kept under forest, (443).

Forest Department should increase plantation of trees useful for

fuel and provide facilities for easy distribution, (438). more Extensive cultivation of shrubs or small trees useful for wood or charcoal, advocated, (443).

HOLDINGS:

Consolidation, legislation, proposal, (437), 51,304-6. Fragmentation below certain limit, prevention advocated, (437).

IMPROVEMENTS, factors discouraging agriculturists from carrying out, (448-7).

IMPLEMENTS:

Improvement advocated, (439).

Introduction, proposed means of hastening, (439). Iron plough, introduction, (434).

Kirloskar Brothers, carrying out of requirements by, 51,314-21.

Labour-saving implements, desirable but must be suited to agricultural conditions, (439).

Requirements, 51,311-3.

Seed drills and small reaping machinery, investigation advocated, (439).

INDUSTRIES, need for increase and co-ordination with agricultural industry and proposal, (433-4), (442).

small Bunds in river beds and rivulets, increase advocated, (437). Canals:

Deccan, crops grown, nature of, and scope for extension of number, 51,194-206.

Distribution of water: by Cultivators on co-operative basis, offered by Department but not accepted and reason, 51,389-92.

Defects of system, (438). by Measurement advocated, (438), 51,241-5. Drainage schemes must accompany canal schemes, (438).

Increase of capacity, should be considered, (437).

Department, rigidity of rules, and more elasticity advocated.

51,216-22. Distribution of water, control by Agricultural Department advocated,

(438), 51,323-4. Extension advocated, and proposed means, (437-8). Irrigators' Associations, 51,347-54.

IRRIGATORS' CENTRAL COMMITTEE, DECOAN CANALS, constitution and objects of, (431), 51,188-93, 51,347-55.

LAND REVENUE, borrowing for payment of, 51,307-9.

MARKETING:

Facilities adequate though not quite satisfactory, (443). Grain, system, (444).

BHAGWAT, K. B.—contd.

MARKETING-contd.

Gur

Co-operative sale societies, (444), 51,251.

System, (443-4).
Information to cultivators, etc. re market conditions etc., might be supplied but little benefit anticipated at present, (444).

Potatoes, in Poona, (444), 51,252-8.

Quality, grading and packing, no demand for improvement by Indian consumers but steps proposed to induce, (444). Sale by weight, gradual compulsion advocated, (444). Vegetable market, Poona, system and conditions, (444). Weights and measures, standardisation advocated, (444), 51,408-9.

Motor Cars, abolition of duty on, advocated, 51,278-9.

RESEARCH:

Central Institute might be maintained by Central Government under control of advisory body on which all Provinces represented, (435), more Centres should be opened in various localities, (432), (435), 51,223

proposed Lines of, (432), 51,204-6, 51,328-46. Provincial organisation advocated, (435).

Soils

Bunding of dry lands, extension advocated and proposed means of encouraging, (438).

Drainage, Nira Canal tracts, (438).

STATISTICS:

Area under each crop not very satisfactory and standardisation of holdings needed, (447). Estimates of yield, not very satisfactory and should be arrived at

by Revenue Department in consultation with Agricultural Department, (447).

VETERINARY:

Control by Director of Agriculture would not be objected to, (439).

Contagious diseases, legislation only advocated after propaganda,

(440).Dispensaries, touring, none known of, (440).

Itinerant Assistants, proposal for, (439-50). Research, further facilities advocated and should be carried on by Provinces, (440). Services, extension advocated, and proposal, (435).

WELFARE OF RURAL POPULATION:

Drinking water, provision of good supply advocated, (447). Economic inquiries:

Advocated and should be conducted by mixed agencies of officials and non-officials, (447).

Dr. Mann's investigations should be taken as guide, (447). Improvement of economic condition of agriculture necessary for, and proposals, (442), (447), (447-8). Physical reconstruction of villages, need for, and proposal, (447).

Bijapur Development Association, work of, Kembhavi (461), 51,464-7.

Bijapur Mahalaxmi Company, particulars re, Kembhavi 51,417-61, 51,488-9, 51,517-57.

Buffaloes, see under Animal Husbandry,

Bullocks, see under Animal Husbandry.

Bulls, see under Animal Husbandry.

BURT, B. C., M.B.E., B.Sc., I.A.S., Secretary, Indian Central Cotton Committee: (42-59), 48,224-48,548, (92-94).

Past appointments, 48,351-2.

AGRICULTURAL DEPARTMENTS, valuable work being done by, but financial resources and staff inadequate for work waiting to be done, (48-9), 48.544-6.

BOARD OF AGRICULTURE in India: Larger and more representative Board, proposal for, 48,516-20. Meetings, attendance of non-officials, value of, and increase desirable,

(47). certain Unreality in proceedings, and reason for, (46-47).

CO-OPERATION:

Departments, closer touch with Indian Central Cotton Committee desirable, 48,449-54.

Marketing or sale societies:
Assistance would be given by Indian Central Cotton Committee, 48.539-41. Binding contracts between members and Society, not possible under Act, 48,419-21.

Seed distribution through, and proposal, (53-54).

COTTON GINNING AND PRESSING FACTORIES, formation of pools, but difficulty of dealing with, 48,392-7.

COTTON TRANSPORT ACT in Surat, note on, (93-94).

CROPS:

Bajra, research organisation, proposal, 48,456-7, 48,477.

COTTON:

Cambodia, success of, (52).
Campore-American, discontinuance of operations for lack of special water supplies, (54).
Financing of investigations by Indian Central Cotton Committee and result of, 48,422-8, 48,455.
Growers, issue of publications for, would be welcomed if undertaken by Agricultural Departments, 48,318-22.
Hybridisation, question of prospects, (52), 48,493-4.
Improvement of existing varieties by modern methods of plant breeding more important than introduction of new varieties, (51).

(51).

Introduction of exotic varieties, results and considerations re,

Introduction of improved varieties, Madras work re, 48,464-7. New varieties, position re information to growers re, 48,251. Punjab-American:

4-F, no permanent deterioration of, 48,269. Investigation by cotton research botanist, 48,269. Success of, (52).

Research: Information sent to local Agricultural Departments, 48,252-4.

Lines in which needed, (44), 48,495-8.

Restriction of localities to growing of certain varieties, object of Cotton Transport Act and wider application desired, 48,460-2. Seed supply and distribution, systems, (53-54).

Small cultivators, question of attention to interests of, 48,292, 49,000.

48,299. Sudan conditions, 48,458-9.

Flax, prospects of cultivation, (52), 48,505-6.

Groundnuts, position re, (52-3).

Improvement, possible methods of, (51-2).

Introduction of exotic varieties, considerations re, (52).

BURT, B. C .- contd.

CROPS-contd.

Introduction of new and improved varieties: Requirements for success, (51).

Work of Agricultural Department, (51).

Juar, research, proposed form of organisation, 48,438-47, 48,456-7. JUTE:

successful Introduction in United Provinces, (53).
Reseach organisation, proposal, 48,372, 48,377, 48,485-6, 48,508-9.
Millets, improvement, need for work re, (52).

Pests and diseases:

Boll-worm, enquiry and grants from Indian Central Cotton Committee, (58, 59), 48,477-80.

Cotton wilt, research, proposed lines of, (44), (58, 59). Grants by Indian Central Cotton Committee, (58-59).

Seed distribution through Co-operative Societies, and proposal, (53-54).

Sugarcane, research organisation, proposal, 48,372-81, 48,485-6. Water requirements, need for investigation, (44-45).

Wheat:

Pusa, successful introduction in United Provinces, (45-6). at Pusa Institute, work re, value of, (48), 48,382-6. Research, proposed organisation and financing of, 48,363-70.

CULTIVATION, rise in standard of agriculture, Hardoi district, United Provinces, (46).

DEMONSTRATION AND PROPAGANDA:
Agricultural Assistants, importance of securing right type of men,

(45).on Cultivators' own fields, the best method, and requirements for success, (45).
District Agricultural Shows, value of, (45).

District farms, value of, (45). Expert advice, incentives to adoption, (45).

Field demonstrations, requirements for success, (45). Non-official agencies, importance of use of, and extension desirable,

(45), 48,502-4.

Success, examples of, (45-46).
Constant Touring by Deputy Directors, Assistant Directors, and Divisional Superintendents, value of, (45).

Holdings

Consolidation:

Advantage of, as regards irrigation, (49, 50). Appointment of experienced revenue officer in each province to work under Registrar of Co-operative Societies or Director of Agriculture, proposal, (49).

Co-operative societies for, advocated, (49).

Legislation will become necessary but should follow successful

demonstrations, (49).

Occupancy tenants and scattered holdings, difficulty of, (49). Requirements for success, (50).

Fragmentation, evils of, (49).

IMPLEMENTS, improvements, need for experimental work, (44).

INDIAN CENTRAL COTTON COMMITTEE:

Central control Committee:
Central economic section may become necessary, 48,468.
Contact with Ministers of provinces, extent of, 48,338.
Co-operative marketing societies would be assisted by, 48,539-41.
Cotton breeding work, 48,487-94.
District Committees, would not be objected to if desired by provincial committees, 48,529-32.

Expenditure on central research institutes, studentships and special investigations.

investigations, (59). Financial position of, 48,331-2, 48,339, 48,343.

```
INDIAN CENTRAL COTTON COMMITTER—contd.
      Financing of, by cotton cess, 48,343, 48,434-5.
Grants to Provincial Governments, (42), (47), (58-59), 48,270-1, 48,275-8, 48,499-500.
      Indore institute, 48,354-6.
Meetings with actual growers, 48,299-301.
Members, honorary and voluntary, 48,340.
Physiological research schemes, 48,533-8.
      Policy, (43).
better Price secured to producer as result of work of, 48,272.
Proceedings, interpretation of, question of necessity, 48,311-2.
Provincial Cotton Committees of, meetings, attendance of witness,
        Publications, 48,542-3.
       Reconnaissance before setting up, (46).
Relations with provincial Agricultural Departments, 48,230-1.
       Representation of growers on:
Particulars of, 48,236-46, (92).
Strengthening of, difficulty, 48,243.
Reserves, application to research in other branches of agriculture, opposition articipated 48,431.
       opposition anticipated, 48,481-2.
Scope of work able to be undertaken by, 48,331, 48,333.
      Closer Touch with Co-operative Departments desirable, 48,449-54. Work of, (42).
Workers, short-term agreement system, 48,469-74.
INTERNATIONAL INSTITUTE OF AGRICULTURE AT ROME:
       Closer relations with, need for, and proposals, (57-58).
permanent Indian delegate, proposal for, and estimated cost,
       (58), 48,436.
World census of agricultural production to be made in 1931,
          desirability of Indian collaboration, (56-57).
IRRIGATION:
       Canals:
              Distribution of water:
                    Running of distributaries to fixed programmes, desirability of, (50-1).
                     Serious study of question, need for, (50-51).
Wastage in village channels, and possible remedy and palliative, (50).
             Productive, should be regarded more as instruments for improv-
ing standard of production and less exclusively as revenue-
                 producing concerns, (51).
       Research, need for experimental work, 48,357-9.
       Water requirements of crops, need for investigation, (44-45).
```

MARKETING .

BURT, B. C .- contd.

Committees, representation of cultivators on: no Difficulty in finding right men, 48,402-3.

Essential to proper working, 48,401.
if Impossible, nomination of representative by Department of Agriculture worth considering, 48,404-5. Cotton:

Auction in public markets, opinion re, and dislike of buyers to. 48,417-8.

Berar, conditions, 48,308.

Bombay (District) Cotton Markets Bill, proposed inclusion of ginning and pressing factories, 48,407-13.

Control by market committee over transactions in compounds of ginning factories advocated, 48,266-7. Disputes after weighment, possible methods of settling, 48,406. Export, competition of American cotton, 48,268. Judging of quality of cotton as kapas or as lint, 48,398.

BURT, B. C.—contd.

MARKETING-contd.

Cotton-contd.

Khandesh, conditions, 48,308.

Markets outside or inside town, a matter of local convenience, 48,414-6.

Price received by cultivator, connection with general reputa-tion of tract, 48,400. Storage accommodation, provision under consideration in Berar,

Surveys by Indian Central Cotton Committee, 48,387-91, 48,483-4.

Advisory Council, proposal for, (48), 48,512-8.
Central, advantage of, shown by Pusa work on wheat, 48,383-6.
Central Government, proposed functions of, (46).
Central organisation for distribution of grants and establishment of new research institutes, proposal, (48), 48,515. Financing of:

Definite research fund free from vagaries of annual budgets, needed, and proposal, (48), 48,432-3, 48,437, 48,510-11, 48,526-8. Grants by Central Government to provincial institutions, proposal, (47).

Jute, cess on, might be justifiable, 48,508-9.

Indore Institute of Plant Industry, system of management, (48)

additional Institutes financed and maintained by Government of India, proposal, (47), (48), 48,521-8.

Organisation:

by Crops, on lines of Indian Central Cotton Committee, posal for certain crops, (42-3), (46), 43,362, 48,363-81, 48,438-47, 48,456-7, 48,485-6, 48,507.
in U.S.A., (46).

U.S.A. federal system not advocated for India, 48,513-4. Flant-nutrition problems, need for increased work on, (43), 48,495. by Provinces, duplication not in itself a disadvantage, apart from financial point of view, (42), 48,353.

Pusa Institute: full Advantage not taken of work of, by provinces, (48), 48,501. closer Relations between Imperial staff and provincial workers desirable, (48).

Value of, to provinces, (47-8), 48,382-6.

Research schemes under Indian Central Cotton Committee, 48,533-8.

Soil problems, need for increased work on, and proposal for strong soil science section at Pusa, (43), 48,495-6.

Technique of field experiments, increased study needed, (44),

48,497-8.

Workers, short-term agreement system, opinion re, 48,469-73.

Soil, waterlogging, need for research, and question of organisation, 48,361.

STATISTICS:

Area and yield, scope for improvement, (54). Areas sown with various crops, annual figures good, but difficulties in connection with, (56). Cotton:

Crop forecasts:

All-India, discontinuance of publication of leaflets, 48,264. Publication of leaflets in the vernacular not considered necessary, 48,261-3. and statistics of consumption and

Estimates of production and statistics of co discrepancies between, 1907-1926, (54, 55, 56).

BURT, B. C .- contd.

STATISTICS-contd.

Crop cutting experiments:
Increased staff and money needed, (56).

Requirements for success, (56). Crop forecasts, scope for improvement, (54).

Estimates.

of Production and statistics of consumption, discrepancies between, (54-56).

Seasonal condition factor, difficulty of, (56), 48,429-30.
Standard outturn, practice re estimation of, (56), 48,430-1.
Financing of work by Central Government, proposal, (57).
Influencing of area sown in following season, possibility doubted,

48,547-8. Interpretation of primary condition reports, more staff and money

needed, (56). Rail-borne trade, re-established for cotton, and full re establishment desirable, (56).

Recommendations of Board of Agriculture, 1924, supported, (54). SUGAR INDUSTRY, improvement in manufacturing methods, advocated, 48,381.

Butter, see under Dairying industry under Animal Husbandry.

CALVOCORESSI, Stephen, and FOTIADI, A., of Messrs. Ralli Brothers: 50.805-50.986.

CROPS:

Castor seed, growing of, in close proximity to other crops, and objection to, and should be prohibited, 50,975-8, 50,982-4.

Berar, deterioration, 50,950.
Central Provinces, improvement should be possible, 50,949.
Central Provinces and Berar, improvement desirable but difficulty owing to buying of, by Japanese, 50,951-3.
Punjab 4r, question of quality, 50,852-5.
Til seed, disappearance of, from export markets, and replacement

by groundnuts, 50,891. Wheat:

Deterioration in quality of Bombay wheat, 50,861.

Foreign competition, 50,985.

Local consumption, increase, 50,862-6.

Indian Central Cotton Committee, good work done by, 50,846.

MARKETING:

Cotton:

Berar, system, 50,807,11. Control over yards of ginning factories, opinion re proposal, 50,816.

Co-operative societies:

Gadag market, boycott of Ralli Brothers for dealing with, 50,828-30.

not Popular with brokers, 50,824-6.

not Popular with brokers, 50,824-6. very small at present but good on principle, 50,827, 50,831-2. Cotton Transport Act, results, 50,820, 50,838-4, 50,937-8. Damping of, in factories and objection to, 50,928-36. Deductions by purchasers outside area of market and beyond control of authorities, reply to complaint, 50,815-6. Ginning factories, pools and difficulty of dealing with, 50,839-45. Ginning and Pressing Act, value of, 50,835-8. Mixing of cottons by cultivators, 50,821-3. Storage, difficulty, as kapas would have to be mixed, 50,817. Value received by cultivators, question as to fairness of, 50,818-20.

50,818-20. Exporting firms, question of extent of knowledge re cultivation, 50,917-21, 50,939-42.

CALVOCORESSI, Stephen, and FOTIADI, A. contd.

MARKETING—contd.

Fixing of grades and standards for All-India produce, extent to which desirable, 50,922-3.

Grain Elevators:

Difficulties in connection with, 50,868-9.

Feasibility in Bombay doubted as quantity of wheat not sufficient, 50,868.

Groundnuts, damping of, and serious results, 50,870, 50,892-910. Middlemen, interests of, 50,944-8. Oilseeds, disappearance of certain varieties from the market,

50,890-1

Raising of grade and standard of Indian produce, possibility of, with propaganda and very strict legislation and supervision, 50,911-16.

Wheat:

Adulteration and damping, no complaints, 50,870.

Adulteration and damping, no companies, 50,876.8.
Adulteration by dirt, improvement, 50,876-8.
Clean wheat, question whether value received for, 50,883-8.
Holding of, for longer period by cultivator than formerly and effect, 50,871-4.
Purchase methods of Messrs. Ralli Brothers, 50,858-60.

OILCAKES:

Export:

Increase anticipated, 50,963-4.

Restriction:

probable Effect, 50,965.
Objected to, as an export, 50,967-9.
Oil contents, question of, 50,972-3.

OILSEEDS:

Foreign competition, 50,985-6.

Question of exporting oil instead of seed, 50,979-82.

RALLI BROTHERS:

Business, nature of, etc., 50,806, 50,954-6. Cotton, purchase methods, 50,807-13, 50,856-7. no Expert knowledge of cultivation, 50,917-21, 50,939-42. Wheat, purchase methods, 50,858-60.

RESEARCH, organisation by crops on lines of Indian Central Cotton Committee, possibility, 50,846-8, 50,849-51.

Shipping conferences, 50,970.

STATISTICS, estimates of crops and yields, earlier information desirable, 50,926-7.

TARIFF, export tax on wheat, would be disastrous, 50,957-8.

Canals, see under Irrigation.

Capital:

Carrying on of agriculture by big capitalists employing labour, objection to, Bhagwat (446).

to, Bhagwat (446).

no Desire by city men to purchase land in the Deccan, Nagpurkar 50,573-7, 50,580-83, 50,620-2.

proposed Means of attracting, to agriculture, G. H. Desai (193); Devadhar (240); Kothawala (485), (489).

Need for attracting, to agriculture, Nagpurkar (373-4).

Obstacles in way of attracting men of capital and enterprise to agriculture as profession, G. H. Desai (193-4).

Reasons for men of capital not taking up agriculture, Naik (340).

Co-operation:

Administration should be by non-officials, Kothawala (489).

Co-operation-contd.

Adult education in, Devadhar (222).
Resolution of Provincial Co-operative Conference, V. L. Mehta (103).Advances by co-operative societies for purchase of cows, would be useful, Devadhar 49,577-80. Agricultural machinery, use of, societies desirable, Peck (276).

All-India Bank, considered at Provincial Banks Conference, but not thought to be advantageous at present, V. L. Mehta 48,692, 48,695. should be Associated with adult education, V. L. Mehta 48,859-61, 48,935-6. Banking unions preferable to banks of mixed type, V. L. Mehta 48,867-8. Banks and branches, use of surplus balances of local sub-treasuries by, proposal, V. L. Mehta (105), 48,673-91, 48,807. in Bijapur district, not very successful and reasons, Gordon (417). Bombay Central Co-operative Bank, sale of implements through, Gurjar 50,493 50,438. BOMBAY PROVINCIAL BANK, Ltd.:

Advances of money for debt redemption, V. L. Mehta 48,723-7.

Branches, Government facilitation of opening of, proposal for, Sir

L. S. Mehta (140), 48,948.

Color of the color of th L. S. Menta (140), 48,948.
Cash credit with Imperial Bank of India, V. L. Menta 48,648.
Cheque system, and advantages of, V. L. Menta, 48,892-8.
Debentures, Government guarantee, V. L. Menta 48,766-7, 48,871.
Demand for long term credit not met by, to any extent, V. L. Menta 48,697.
Financing of, V. L. Menta 48,638-48.
Issue of further debentures under consideration, V. L. Menta 48,644-5. 48,644-5. History of, V. L. Mehta 48,633-7. Lending to, and receipt of deposits from, other Provinces, V. L. Mehta 48,693-4. Memorandum agreed with, generally, Sir L. S. Mehta (139).

Money lent only to registered societies and not to cultivators, and undesirability of lending direct to cultivators, V. L. Mehta 48,649-52.
Opening of branches of, versus starting new local central banks,
V. L. Mehta 48,867-9. Relations with Agricultural Department, V. L. Mehta 48,784. Share capital, amount of, and amount held by individuals and by societies, V. L. Mehta 48,787-92.

Supply of sulphate of ammonia and iron implements by, working as agents on commission, V. L. Mehta (104), 48,660-6.

Surplus, V. L. Mehta 48,686-90.

BOMBAY PROVINCIAL CO-OPERATIVE INSTITUTE:

Economic inquiries carried out by, particulars re, Devadhar (220), 49,310-2, 49,377-81.
Functions, Devadhar (237), 49,342.
Funds of, and sources, Devadhar 49,450-1.
Propaganda by, for organising new types of societies, proposal,

Devadhar (238).

Lecture tour with lantern slides and success of, Ransing (390). Relations with Department of Education, Devadhar 49,606. Scholarships for students to visit other countries and provinces, proposal, Devadhar (238).

CATTLE BREEDING SOCIETIES:

Difficulties in connection with, but good work done, Devadhar (231). Proposal, G. H. Desai (183), 49,217-8. Success not anticipated in Gujarat, G. H. Desai (192). Success doubted under present circumstances, Kothawala (484).

CENTRAL BANKS, location in midst of the people, importance of, and proposal for encouragement, V. L. Mehta (105), (112).

```
Co-operation-contd.
        Central institutions, importation and distribution of agricultural imple-
        ments, appliances and machinery by, proposal, Goheen (500).

Change in system of advancing money to cultivators on security of holdings, etc., advocated, Kothawala (489).

Collectors should take interest in, Gordon 51,131.

Commission shops, particulars re, Indian Central Cotton Committee,
       (30-1).

Condition of movement, Bhagwat (444), 51,264-73.

Consolidation of holdings, see under Consolidation under Holdings.

Co-ordination in work of credit and purchase and sale advocated,

V. L. Mehta (113), 48,818-21.

Cotton ginning and pressure factories:

Proposal, Shirhatti (295-6), 49,797.

Proposals and requirements for success Indian Central Cotton Com-
                 Prospects and requirements for success, Indian Central Cotton Com-
        mittee (31).
Technical control a difficulty, V. L. Mehta 48,752-5.
Credit needs of agriculturists, extent to which met by, Devadhar 49,325.
        CREDIT SOCIETIES:
                Advances to cotton-growing members, inadequacy of, in some cases and difficulties in connection with. Indian Central Cotton Com-
                     mittee (28-9).
                 Assistance advocated, Naik (338). free Audit, proposals, V. L. Mehta (111-2), 48,756-65, 48,881-8; Devadhar (238).
                 Banwasi, particulars re, Devadhar (243-4), 49,603-4. the Best form for both long-term and short-term finance, G. H.
                     Desai (159).
                 the Best method, Bhagwat (446).
Borrowing both from moneylenders and, Indian Central Cotton Committee (28); G. H. Desai (191).
                 Combination of sale and purchase societies with, advocated at first, G. H. Desai (191).
                 Control by joint board consisting of Director of Agriculture, Regis-
                     trar of Societies and a few non-officials, Bhagwat (445).
                trar of Societies and a few non-officials, Bhagwat (445).
Co-operation of sale societies with, proposals for, Shirhatti (290).
Development, scheme, Shirhatti (289-90).
Failure, causes of, where occurred, Devadhar (240).
Financing of, Devadhar (239).
Financing of cotton crop by, need for, and scheme, Shirhatti (289).
Government financial assistance, proposal, Kothawala (484).
Hadapsar, results, Devadhar (239-40).
Limit on advances to individuals:
Change in form advacated under certain conditions V. L.
                         Change in form advocated under certain conditions, V. L.
                         Mehta (113), 48,768-80.
Raising of limit, would not solve problem, V. L. Mehta
                             48,846-54.
                         Rs.300 inadequate and revision needed, V. L. Mehta 48,925-8.
                 Loans:
```

Procedure for obtaining, Shirhatti (289). Sale of all produce through sale societies should be condition

of, Shirhatti (290). Statements of normal credits, system of, V. L. Mehta (112), 48,773-4, 48,800-6, 48,862-6.

Long term credit, proposed provision advocated, (416), 50,994-9; Bhagwat (436).

Management, proposal, Shirhatti (289).

Maximum credit should be fixed on assets of individual member, Shirhatti (289-90), 49,789.

Need for, Peck (276).

Postal savings banks deposits should be placed at disposal of, D. P. Desai (314).

Provision of funds by Government for long term loans by, proposal, Nagpurpar (368), 50,453-4.

Co-operation—contd.

```
CREDIT SOCIETIES-contd.
```

Rate of interest charged by, Devadhar 49,601-2; Indian Merchants'

Chamber, Bombay (513).

should be as Low as possible, Kothawala (489).

Opinion re, V. L. Mehta 48,929-30; Devadhar 49,601 2.

for Short term loans, the most suitable system, V. L. Mehta (104);

Sir L. S. Mehta (140).

for Short-term and long-term loans, would be approved, Kembhavi 51,477.

South Daskroi taluka, Kothawala (489). Staff, proposal, Shirhatti (290).

CREDIT SYSTEM:

Increase in centres of distribution, need for, and steps being taken,

Devadhar (225).

Position of, Devadhar (224-5).

Widespread development advocated, Devadhar (224-5).

Debt redemption through, and proposal, V. L. Mehta (108), 48,723-7, 48,815-21, 48,933.

DEPARTMENT:
greater Co-operation with Agricultural and Veterinary Departments, need for, Devadhar (223), 49,323-4.
Functions advocated for, V. L. Mehta (112).
Good work being done but increased funds needed, D. P. Desai

50,079-83. closer Touch with Indian Central Cotton Committee desirable, Burt

48,449-54.
Deposit banking, proposals for encouragement, V. L. Mehta (112).

Deposit banking, proposals for encouragement, V. L. Mehta (112). an Economic movement but combination of social questions with, not objected to, G. H. Desai 49,205.

Education of borrowers, importance of, and steps taken in areas served by Bombay Provincial Bank, V. L. Mehta (104), 48,667-9.

Education of members in co-operative principles, payment of staff by Government would be agreed to, but through central representative body, V. L. Mehta 48,884, 48,887.

Education and propaganda, voluntary associations with State financial assistance advocated, V. L. Mehta (111).

Educative effect, value of, Devadhar 49,341.

Effect on moneylenders, V. L. Mehta (114).

Encouragement by Government advocated, Kothawala (489).

Encouragement of growth of, profosed means: Kembhavi (469).
by Government, V. L. Mehta (104-5), (111-2), 48,672-95; Sir L. S.
Mehta (142); G. H. Desai (190); Devadhar (238-9), 49,450-1;
D. P. Desai (319); Naik (340); Nagpurkar (373); Kothawala (484).

by Non-official agencies, V. L. Mehta (112); Sir L. S. Mehta (143); Devadhar (239).

Extent to which rural leaders trained by, Sir L. S. Mehta 48,960-3. Fencing, should be tried near forest areas and extended if successful,

Fencing, should be tried near forest areas and extended if successful, Bhagwat (439).

Fencing societies, proposal, Devadhar (230).

Few societies in Gujarat, and reasons, G. H. Desai 49,111-2.

Fodder-storage societies, advocated, Devadhar (231).

Government functions re, proposed limitation, G. H. Desai (190).

Hand-loom weaving and spinning on co-operative basis, proposal, Peck (276), 49,647-9, 49,678-96.

Hand-spinning industry, development of, through, proposal, J. K. Mehta 52,047-50.

IMPLEMENTS, sale through:
Proposal, V. L. Mehta (109), 48,826-31; Goheen (500).
Societies for supply of implements on hire or hire-purchase system, success of, and extension advocated, Devadhar (230).

Importance of all forms of, Kembhavi (469).

Co-operation-contd.

IMPROVEMENT SOCIETIES:

would be Beneficial, Kothawala (484).

Value to be derived from, in Gujarat, G. H. Desai (191).

Success of, in Dharwar and Kanara districts, Devadhar (239).

Increase in membership and business anticipated, Mehta 48,783.

Instalment shares, proposed introduction of system in certain districts, V. L. Mehta (112).

IRRIGATION SOCIETIES:

Assistance by loans, etc., proposal, Devadhar (228). Proposal, Sir L. S. Mehta (141).

Issue of remittance transfer receipts direct from provincial headquarters to sub-treasuries and vice versa, advocated, Mehta (105), 48,672-3, 48,921-4.

Issue of taccavi loans through, see under Taccavi loans under Finance.

JOINT FARMING SOCIETIES: Difficulties, Devadhar (239).

Success doubted at present, G. H. Desai (191-2), 49,098-100.

Joint Improvement Schemes, compulsion on minority to join:
Advocated, G. H. Desai (192); Gordon (417).
Advocated by Provincial Co-operative Conference, 1923, Devadhar (239).

not Advocated, Naik (340).

Care would be necessary, Bhagwat (445).

might be Useful, Kothawala (484). Land Mortgage Banks, see under Finance.

Land mortgage business not suitable for, V. L. Mehta (105), 48,698-9. Local unions, proposals for encouragement, Sir L. S. Mehta (143).

Movement not deeply rooted owing to want of education and lack of funds, D. P. Desai (319).

Movement very useful if good men take interest in, Gordon 51.056.

Necessary for improvement of agricultural conditions, Peck (276).

Non-credit societies, position, Devadhar 49,405-7.

Non-official agencies:

Constitution, criticism, and leaders should come from agricultural class, G. H. Desai (190-1).

Devolution of powers from Government to, advocated, G. H. Desai

Encouragement of, and policy of devolution of functions to, and extension of policy advocated, Devadhar (237-8), 49,342-60, 49,536-7.

Value of, but official element also needed, Devadhar 49,413-7. Work of, Sir L. S. Mehta 48,954.

Official element, proposals for gradual decrease, V. L. Mehta 48,905-11. Organisation of movement, Sir L. S. Mehta 48,959. Organisation of subsidiary industries, proposal, V. L. Mehta (110); G.

H. Desai 49,286.

Payment of loans by cheque, statistics of, and desirability of extension.

V.L. Mehta (112-3).

Phenomenal success of movement, Devadhar (235-7), 49,340. Position in Bombay and the Punjab, comparison, Devadhar 49,343-53, 49,445-9.

Primary societies with unlimited liability, provision of free audit by Government advocated until free and compulsory educaton introduced throughout the country, proposal, V. L. Mehta (111-2), 48,756-65, **48**,881-8.

Principles, theory and practice, teaching of, in schools, proposal, Nevadhar (221).

Progress of movement, Sir L. S. Mehta 48,941.

Provincial Co-operative Institutes, recognition by Government advocated, as in Bombay, V.L. Mehta 48,855-6. for Purchase of household necessities, proposal, G. H. Desai (191).

Co-operation—contd.

```
PURCHASE SOCIETIES:
                 Advocated, Kothawala (489).
Benefits, V. L. Mehta (114).
                Combination with sale, desirable, V. L. Mehta (113).
Combination with sale and credit societies advocated at first, G. H.
                     Desai (191).
                Requirements for success and proposals, V. L. Mehta (114).
         REGISTRAR:
                  Appointment, opinion re, Devadhar (238-9).
                Deputies or Ass
Devadhar (238).
                                           Assistants, visits to foreign countries, proposal,
                 Transfer of powers and functions to Deputies or Assistants, proposal, 
Devadhar (238), 49,360.
        Representation on Indian Central Cotton Committee, Kay 48,243.
Restricted scope of, in Gujarat, G. H. Desai (161).
Results, G. H. Desai (192); V. L. Mehta (114); Devadhar (239-40), 49,481-5; Naik (340).
        Sale of fertilisers through, and proposal re, V. L. Mehta (108-9); Sir L. S. Mehta (142).
        Sale societies, see under Marketing, Co-operative.
Sangli State, position of movement, Goheen 51,705-8.
Schoolmasters, proposed classes for, Devadhar (239), 49,454.
Seed distribution, see under Seeds under Crops.
Separate societies dealing in a single commodity, for example seeds,
        implements, manures, etc., not advisable, Shirhatti (290). for Silage making, proposal, Goheen (498), (501), 51,764-9. in Sind, progress and success of, Devadhar (236), 49,534-5. no Societies for depressed classes known of, and failure of experiment,
            Peck 49,636-7, 49,665-6.
        SOCIETIES
                for Creation of grass reserves, Baroda, G. H. Desai (184). for Erection of dams near creeks, and proposals for extension, Devadhar (229).
                Government should issue loans to, at rate at which they can borrow,
                D. P. Desai (314).
of all Kinds useful and should be encouraged, Naik (340).
                for Social or marriage reforms, thrift, etc., not common and reason.
                    Devadhar (239).
       Sowcar must be replaced by, Sir L. S. Mehta (140), 48,947. Staff, subordinate, qualifications advocated, Devadhar (239).
        SUPERVISION OF SOCIETIES:
               Means of, and need for larger funds, Devadhar 49,452-4. by Taluka Development Associations advocated, Ransing 50,712.
       Surpluses of sub-treasuries, deposit of portion with local central banks or branches of larger banks advocated, Sir L. S. Mehta (140), 48,948. Taluka Development Associations, see under Welfare of Rural Popula-
            tion.
       Transfer of funds, facilities advocated, Sir L. S. Mehta (140). Urban and central banks, audit, banks should be permitted to select own professional auditors, proposal, V. L. Mehta (112), 48,839-91.
        Value of movement:
       Value of movement:

in Connection with introduction of new and improved implements,
Sir L. S. Mehta (142).

in Promoting welfare of the masses, Devadhar (235-7), 49,478-85.

Village dairy societies needed, D. P. Desai 49,055.

Voluntary workers preferred to official, Gordon 51,057-62.

Wells, protection against flood, trespasses, &c., need for societies, Peck
            (276).
        Wholesale society in Bombay formerly, Sir L. S. Mehta (142).
Cotton, see under Crops.
```

Cotton Transport Act: Indian Central Cotton Committee (5), (23), (34).

Benefit, Fotiadi 50,820, 50,833-4. Objections to, D. P. Desai 50,060-2. Results, Fotiadi 50,937-8. in Surat, note on, Burt (93-94).

Credit, see under Agricultural Indebtedness.

Crops:

Bairi:

Deterioration in quantity and quality and causes, D. P. Desai 49.946-8.

Fertilisers:

Investigation of question and further experiments needed, Nagpurkar 50,460-4. not Profitable without sufficient rainfall, Nagpurkar 50,460 Introduction of new variety into Khandesh district, Ransing (387). Research, proposal, Burt 48,477, 48,456-7.

Castor seed, growing of, in close proximity to other crops and objection to, and should be prohibited, Calrocoressi 50,975-8, 50,982-4. Cereals, research advocated, Bhagwat (432).

Change to, advocated, Kothawala (488). Discouragement not advocated, Walchand Hirachand 52,134-5. Change from food crops to, as cause of borrowing, V. L. Mehta (106), 48,734-43.

Food crops should have preference over, Nagpurkar 50,623.

1027, introduction of, G. H. Desai (158).
Berar, deterioration, Foliadi 50,950.
Bijapur, poor quality and quantity, investigation advocated,
Kembhavi (466).
Breeding work of Indian Central Cotton Committee, Burt 48,487-94.

Cambodia, success of, Burt (52).

Castor cake as manure for, in Khandesh district, Ransing (389). Cawnpore-American, discontinuance of operations for lack of special water supplies, Burt (54).

Central Provinces, improvement should be possible. Fotiadi 50.949. Central Provinces and Berar, improvement desirable but difficulty owing to buying of, by Japanese, Fotiadi 50,951-3.

Clean picking:

Importance of, Indian Central Cotton Committee (22-23); Shirhatti (285), (294).

Steps taken to encourage, Indian Central Cotton Committee (5); Shirhatti 49,812-21, 49,858-9.

Development since 1918, Indian Central Cotton Committee (2).

External infection, protection against:

Co-operation of maritime Indian States, need for, Indian Central Cotton Committee (13).

Measures for, Indian Central Cotton Committee (6), (13).
Financing of cultivators: Indian Central Cotton Committee (28-9);
Burt 48,455; Shirhatti (288-9).

by Co-operative credit societies, need for, and scheme, Shirhatti

further Credit required by cultivators, Shirhatti 49,789-96. Investigations into, Indian Central Cotton Committee (6); Burt 48,422-8.

Ginning and pressing factories: Combination into pools, Burt 48,392-7; Shirhatti (295); Fotiadi 50,839-45.

Crops-contd.

COTTON--contd.

Ginning and pressing factories-contd.

Co-operative factories:
Proposal, Shirhatti (295-6), 49,797.
Prospects and requirements for success, Indian Central

Trospects and requirements for success, Indian Central Cotton Committee (31).

Technical control a difficulty, V. L. Mehta 48,752-5.

Extent of power over factories, and question of further legislation, Kay 48,286-7.

Ginning as 48,286-7.

Ginning, as subsidiary industry in Gujarat, G. H. Desai (187). Licensing of owners advocated, Karmarkar 49,926, (311). Position re, and prospects, Indian Central Cotton Committee

(14).

Growers:

Agricultural Departments, Kay 48,318-22.

Representation on Indian Central Cotton Committee, see that

title

Hybridisation, question of prospects, Burt (52), 48,493-4. Improved seed, question as to profit to cultivators from, D. P. Desai 50,071-6; Naik 50,191-7.

Improved varieties: Introduction of:

in Bijapur, Gordon (415).
Madras work re, Burt 48,464-7.
Proceedings re, D. P. Desai 49,976-82.
Steps taken for encouragement of, Indian Central Cotton Com-

mittee (5).
Work of Agricultural Department re, Kay 48,258.
Improvement of existing varieties by modern methods of plant breeding more important than introduction of new varieties, Burt (51).

Improvement, taxation for, without any tangible advantage, D. P. Desai 50,049-9. Indian Central Cotton Committee, see that title.

Internal protection, measures, Indian Central Cotton Committee (13-14).

Introduction of exotic varieties:

Results and considerations re, Burt (52).

no Serious attempt made, acclimatisation and hybridisation advocated, D. P. Desai 50,040-2.

Marketing, see that title.

Neglectum roseum, introduction into Khandesh district by Taluka Agricultural Association, Ransing (388).

New varieties:

Information to growers re, position re, Kay 48,249-50; Burt

Particulars re, results, etc., Indian Central Cotton Committee (12-13).

Pests and diseases, see that title below.

Production, increase during last few years, Kay 48,350. Progress of crop by varieties and length of staple, 1915-1925, Indian Central Cotton Committee (37).

Punjab-American:

no permanent Deterioration of, Burt, 48,269.

Investigation by cotton research botanist, Burt 48,269. Quality, question of Foliadi 50,852-5.

Success of, Burt (52).

Research:

Agricultural, particulars re work, Indian Central Cotton Committee (8-9).

```
Crops—contd.
        COTTON-contd.
                Research—contd.

Grants to Provincial Departments of Agriculture, Indian
                         Grants to Provincial Departmen
Central Cotton Committee (9-11).
                                 Control of grants, procedure re, Kay 48,279-80.
Principle followed by Indian Central Cotton Committee,
                                     Kay 48,274.
                                  Provincial experiments not abandoned on receipt of, Kay 48,275; Burt 48,276-7.
                                  Provincial share of expenditure increased, Burt 47,278,
                        Indore Institute of Plant Industry, particulars re, financing of, etc., Indian Central Cotton Committee (8); Kay 48,227. Information sent to local Agricultural Departments, Burt
                             48,252-4.
                        Lines in which needed, Burt (44), 48,495-8.
little Progress made, and reasons, D. P. Desai (312), 49,975-82.
Progress of work, Kay 48,226-8.
                         Provincial schemes, particulars re, Indian Central Cotton Com-
                        mittee (38-41).
Studentships, Indian Central Cotton Committee (11), (31-2).
Technological, particulars re work, Indian Central Cotton Com-
               Workers, supply, Kay 48,328.
Restriction of localities to growing of certain varieties, object of Cotton Transport Act and wider application desired, Burt 48,460 2.
                Seed
                                by Agricultural Department satisfactory, Kay 48,284-5. by Co-operative societies in Khandesh, statistics, 1923-26, V. L. Mehta (113).
                         Distribution:
                                 through
                                                    Co-operative societies and proposal re, Burt
                                     (53, 54).
               (53, 54).

the Function of Agricultural Department, Kay 48,327.

Multiplication farms needed, and proposal, Shirhatti (294-5).

Supply and distribution, systems, Burt (53-54).

Small cultivators, question of attention to interests of, Kay 48,291, 48,298; Burt 48,292, 48,299.

Southern Maratha country, types grown, system of cultivation, etc., Chimhatti (992 5).
                    Shirhatti (283-5).
               Spinning tests, Indian Central Cotton Committee (5-6).
Statistics, see that title.
Sudan conditions, Burt 48,458-9.
Waste land, giving out of, for cotton cultivation in some talukas,
Gordon 51,082-4.
                Yield decreasing, Naik 50,149.
       Crops and diseases in Gujarat needing investigation, G. H. Desai (155).
      Damage To:
by Animals, religious prejudices against destruction of animals decreasing, Goheen (499-500), 51,713-4.
by Birds, Kothawala (481).
by Stray cattle, G. H. Desai (177); Kothawala (481).
and proposed Measures re, G. H. Desai (177-8), 49,080-6; Naik
              by Wild Animals: G. H. Desai (177); Naik (339); Kothawala (481).
Decreasing, Nagpurkar (371).
Prevention, proposed means of:
Arms Act should be made more liberal, Nagpurkar (371).
Co-operative fencing societies, proposal, Devadhar (230).
```

reduced prices, Kothawala (481).

Exemption of cultivators from operation of Arms Act, Kothawala (488).

Freer issue of gun licences and supply of barbed wire at

```
Crops-contd.
```

```
DAMAGE TO-contd.
```

by Wild Animals-contd.

Prevention-contd.

Consolidation of holdings will facilitate fencing, G. H.

Desai (178). Co-operative fencing should be tried near forest area and

extended if successful, Bhagwat (439).
Grants of seasonal licences for guns through co-operative

societies, proposal, Devadhar (230).

Gun licences, increased number and licensing of actual weapon instead of individual advocated, Bhagwat (439),

Issue of gun licences on liberal scale the only means, D. P. Desai (317).

Desai (317).

Shikar parties, Bhagwat (439).

Wire fencing the only method, and taccavi for, desirable, G. H. Desai (178).

Recommendations by committee on prevention of, should be given effect to, Naik (339).

Shooting of animals, religious sentiment against, in Gujarat, G. H. Desai (177).

Deterioration in quantity and quality owing to want of proper cultural treatment of soil, and need for thorough investigation, D. P. Desai (312-3), 49,946-8, 49,985-8, 50,065-6.

Flax. prospects of cultivation, Burt (52), 48,505-6.

Flax, prospects of cultivation, Burt (52), 48,505-6.

Fodder, see under Animal Husbandry. Fruit and vegetable growing and flower gardens, Kembhavi (466).

Annual yield and comparison with requirements of population,
Nagpurkar (366), 50,465-79, 50,561-9.
Improvement, improvement in fodder supply as result, Nagpurkar

Marketing, see that title.

Grape-vines, spraying of, Bhagwat (435).

Grasses, improvement, research advocated, Bhagwat (432), 51,339-46.

GROUNDRUTS: D. P. Desai 50,067-70.
Cultivation of, not due to work by Agricultural Department, D. P. Desai 50,014-6.

Damping of, and serious results, Calvocoressi 50,870, 50,892-910. Damping of, practice and reasons for, Kembhavi 51,434-44, 51,526-30.

Foreign, introduction into Khandesh district by Taluka Agricultural Association, Ransing (388), (389). Introduction into Kaira, Gordon (415).

Position re, Burt (52-3).

Tendency for expansion of cultivation, Burt (52). Wilt, investigation needed, G. H. Desai (155).

IMPROVEMENT OF EXISTING CROPS:

by Hybridisation, possibility of, G. H. Desai (177). Local associations or co-operative societies the best agency for, Devadhar (230).

Means of, Burt (51-2); Naik (339); Kothawala (481). Need for, and investigation of each crop advocated, D. P. Desai (317).

little Progress made by Agricultural Department and reasons, D. P. Desai (312), 49,934-8, 49,974-82, 50,013-6, 50,063-5, 50,066.

Provincial research programme, need for, G. H. Desai (176).

Research advocated, Bhagwat (438), (439).

Scope for, and proposed lines of, Goheen (498), 51,757-8.

by Selection and breeding of dry food crops, possibility, Nagpurkar (370).

```
Crops—contd.
      IMPROVEMENT OF EXISTING CROPS—contd.
by Selection, possibility of, G. H. Desai (177).
Trial plots, proposal, D. P. Desai (312), 49,983-4, 49,949.
Work of Agricultural Department, Sir L. S. Mehta 49,017-9.
INTRODUCTION OF EXOTIO VARIETIES:
             not Advocated, Nagpurkar (371).
       Considerations re, Burt (52).

Introduction of New and Improved Varieties:
              Investigation, scope for, G. H. Desai (178).
              Local associations or co-operative societies the best agency for,
                 Devadhar (230).
              possible Means of, G. H. Desai (176-7).
              Proposals:
             Guinea grass, as fodder crop, Kothawala (481).
Vegetables, near large towns, Kothawala (481).
Requirements for success, Burt (51).
Research advocated, Bhagwat (438).
Work of Agricultural Department, Burt (51).
             Average yield per acre, D. P. Desai 50,019.

Drought-resistant and quick-maturing varieties from California; successful introduction on farm of Sangli Industrial and Agricultural School, Goheen (498-9), 51,710-2.

Mungari, strain which will ripen within four months, need for,
                 Kembhavi (465-6).
             Research, proposed form of organisation, Burt 48,438-47, 48,456-7. Sundia, introduction of, from Gujarat by Dhulia Taluka Agricul-
                 tural Association, Ransing (388).
              successful Introduction in United Provinces, Burt (53).
              Research, financing of, from cess might be justifiable,
                 48,508-9.
              Research organisation, proposal, Burt 48,372, 48,377, 48,485-6.
       LUCERNE: G. H. Desai (185).
      Introduction of, from Gujarat by Dhulia Association, Ransing (388).

Maize, proposal, Kembhavi (466).

Millets, improvement, need for work re, Burt (52).
Oats, introduction proposed, Bhagwat (439).
                                                         Gujarat by Dhulia Taluka Agricultural
       Oilseeds, see that title.
       PESTS AND DISEASES:
             Cotton
                    Boll-worm:
                           Damage by, in certain provinces, and measures re, Indian Central Cotton Committee (13-4).
                            Provincial research, particulars re, and grants, Indian
Central Cotton Committee (38), (39-40), (40-1); Burt (58,
                    59), 48,477-80.
Grants by Indian Central Cotton Committee, Burt (58-59).
Investigation and scientific measures for removal advocated,
                        Shirhatti (294).
                    Provincial research schemes, Indian Central Cotton Committee
                        (38-41).
                     Strains resistant to, introduction desirable, Shirhatti (294).
                     Wilt:
                            Provincial investigations, Indian Central Cotton Committee
                           (38-9), (41); Burt (58), (59) further Research, need for, and proposed lines of, Burt (44);
              G. H. Desai (155).
Investigation, need for, G. H. Desai (155-6).
             Locusts, Devadhar (230).

Mexican boll weevil, measures taken for prevention of introduction,

Indian Central Cotton Committee (6), (13).
```

Crops-contd.

PESTS AND DISEASES-contd.

```
Smut:
               Investigation needed, G. H. Desai (155).
               Use of copper sulphate as preventive of, non-adoption by cultivators, but smut not a great problem, Bhagwat (435), 51,234-40, 51,287-303.
       White ant extermination, attention needed, G. H. Desai (155). Wilt, investigation needed, G. H. Desai (155).
POTATOES:
        Marketing, see that title.
       Seed, source of, Bhagwat 51,259.
Storage, Bhagwat 51,261-3.
PROTECTION :
       Active steps for prevention of infection and loss through pests and
       disease advocated, Goheen (499-500).
Co-operation between districts necessary, Goheen (499).
       Cotton, see under Cotton above.
from External infection: Nagpurkar (371).
              Importance not understood by cultivators and no measures taken to train, Kothawala (481).

Investigation in well equipped laboratory necessary, Kembhavi
                  (466).
              Measures probably satisfactory, Goheen (499).
Restrictions sufficient to avoid danger from importation, G. H.
Desai (179).
       from Internal infection:
              Investigation needed, Nagpurkar (371).
      Need for measures, G. H. Desai (179); Kothawala (481).
Recommendations and advice of mycologists must be followed by departmental farms, Kembhawi (466).
Preventive measures should be ready in advance, example of unpreparedness of Department, Devadhar (230).
Propaganda necessary, in favour of adoption of prevention methods against diseases, Devadhar (230).

e. improved variety introduction (1 H Desai (158) (178). Phagazate
         improved variety, introduction, G. H. Desai (158), (178); Bhagwat
Rice
   (439).
SEEDS:
       Better quality, organisation of distribution advocated, Kembhavi
       Co-operative unions, Indian Central Cotton Committee (31).
      Distribution :
              Big seed depots at proposed Government taluka farms advo-
cated, Kothawala (481).
             Co-operative depots, proposal, Shirhatti (291). through Co-operative societies:
                      Advantageous, but closest touch between Agricultural Department and, necessary, Indian Central Cotton Com-
                                                                                                          Agricultural
                         mittee (29).
                      the Best system and extension advocated, G. H. Desai (177).
                     and Proposal, Burt (53, 54).
             Co-operative stores advocated, Kothawala (489). of Good seeds, importance of, and proposal, Goheen (498). Government depots for, proposal, Walchand Hirachand 52,085-8. by Government farms, advocated, until seed agencies established,
                  Bhagwat (439).
              Local associations or co-operative societies the best agency for,
                  Devadhar (230).
              under Management of local governing bodies supplied from a centre, proposal, Peck (276).

Proper seeds, importance of, Kembhavi (466).
      Private industry, scope for development, Goheen (498).
Rewards for good quality seeds, proposal, Devadhar (230).
Selection and distribution a necessity, Nagpurkar (371).
```

Crops-contd.

SEEDS-

Selection by farmers in some cases, G. H. Desai (177). Selection and preservation, need for propaganda in better methods, Nagpurkar (371).

Ammonium sulphate, use of, G. H. Desai (158), (176); Nagpurkar (370), 50,512-7, 50,537-9; Bhagwat (438).

H.M. 544, introduction, Bhagwat (439).

Non-growing of, in Nadiad district owing to water difficulty, D. P. Desai 49,943.

Research organisation, proposal, Burt 48,372-81, 48,485-6.
Wide planting, introduction of, Bhagwat (435).
Til seed, disappearance of, from export markets, and replacement by groundnuts, Calvocoressi 50,891.

Товассо:

Experimental farm, D. P. Desai 49,938, 49,951-2. Experiments by Department and closing down of, and little progress made, D. P. Desai 49,938.

Wilt, investigation needed, G. H. Desai (155). Water requirements, need for investigation, Burt (44-45).

Deterioration in quality of Bombay wheat, Calvocoressi 50,861. Foreign competition, Calvocoressi 50,985. Local consumption, increase, Calvocoressi 50,862-6.

Marketing, see that title.

Pusa:

Introduction, Bhagwat (439).
Successful introduction in United Provinces, Burt (45-6).
Pusa Institute work re, value of, Burt (48), 48,382-6.
Research, proposed method of organising and financing, Burt 48,363-70.

YIELD:

Decreased, G. H. Desai 49,134-46. need for Increase, Nagpurkar (366).

Cultivation:

Bullocks, see under Animal Husbandry. Deep ploughing, would be adopted if increased yields resulted, G. H. Desai (178).

Deeper ploughing needed, Kembhavi (466).

DRY FARMING:

Fertilisers for, investigation needed, Nagpurkar 50,455-7. in Gujarat, owing to obstacles to extension of irrigation, Naik 50,233-4.

proper Implements for, investigation advocated, Goheen 51,773.

Instruction of cultivators advocated, Goheen (499).

Intensive study and propaganda advocated, Bhagwat (432), 51,328 38.

Introduction of methods of, in scanty rainfall areas, advocated, Goheen (498).

Personal experience, Goheen 51,770-3.

Problem of, and requirements, Nagpurkar (366). Students should be sent to other countries to study, Devadhar

(230).Uneconomic nature of, a cause of agricultural indebtedness, Bhagwat

(431), (436), (437).

Dry farming areas, cultivators have less heart and energy in work,
Bhagwat 51,393-6.

Improvement, proposals, Kothawala (481); Goheen (499).
Improvement of system, little evidence of need for, but choice of suitable implements necessary, G. H. Desai (178).

```
Cultivation-contd.
```

Indian system of tillage, rotation and mixing, no improvement needed, Nagpurkar (371).

Indigenous theory and traditional methods, should be brought up to date, Kembhavi (462).

practically no Margin of profit in, Devadhar 49,437-41.

MIXTURE OF CROPS:

in Baroda, practice of, G. H. Desai (179), 49,046-9.

Customary, fairly suitable, Goheen (499). Recommendation, Kothawala (481).

Value known to people but not resorted to where crop standardised,

D. P. Desai (317).
Production, rise in cost of, Devadhar 49,418-30.

ROTATION OF CROPS: G. H. Desai (179). Customary, fairly suitable, Goheen (499).

must be Determined according to economic return, Kembhavi (466).

Understood by cultivators, Kothawala (481).

Value known by people but not resorted to where crop standardised,

D. P. Desai (317).

Sowing wider apart and ridge cultivation taken up, Naik (339).

Decline in, in Gujarat, and causes, Gordon 51,018-33.
Rise in, Hardoi district, United Provinces, Burt (46).
Terracing, scope for, in Bijapur, Gordon 51,094-5.
Thinner sowings with greater distances between rows, advocated, Goheen (499).

Tillage and cultural operations, neglect of, and reasons, D. P. Desai (317).

Dairying industry see under Animal Husbandry.

Deccan Agriculturists' Relief Act, see under Agricultural Indebtedness.

Demonstration and propaganda:

Agricultural Assistants, importance of securing right type of men, Burt (45).

Agricultural Associations, see under Welfare of Rural Population.

leading Agriculturists must be associated with propaganda work, V. L. Mehta (103).

Cinema films, by G.I.P. Railway, Kay 48,283.

ON CULTIVATORS' FIELDS.

Advantages of, Ransing (388).

Advocated, Gordon (415-6), 51,144. not Advocated, Kothawala 51,678-9.

the Best method, and requirements for success, Burt (45).
Cultivators should be guaranteed against loss, Ransing 50,746-8;
Gordon (416), 51,144.

Cultivators should be guaranteed a minimum income from land used for, Ransing (389), 50,671-5, 50,679.

Proposals, Devidhar (222-3); Nagpurkar (367).

Useful, Naik (338).

Demonstration the only practicable method of propaganda, Nagpurkar (367).

DEMONSTRATION FARMS:
Alibag, failure of, Gordon (415).

Cultivators timid of taking up improvements shown on, Ransing

for Each taluka, advocated, Kothawala (477), (486), 51677-9. Education of people to understand advantages of, needed, Sir L. S.

Mehta 49,020. Failure to influence cultivators, reasons for, D. P. Desai (313),

49,949. Nadiad, given up, Gordon (415). Useful, Naik (338).

XXXIV

```
Demonstration and propaganda-contd.
      Demonstration train in Bengal and extension to other provinces advocated, Devadhar (222), 49,321-2.
      District Agricultural Overseers, organisation into associations on lines
         of Servants of India Society, proposal, Goheen (497), 51,709, 51,736-7,
         51,743-55.
      District Agricultural Shows, value of, Burt (45).
      District farms, value of, Burt (45). diffusion of Education necessary for spread of influence of, V. L. Mehta
      Exhibitions and prizes proposed, Kembhavi (463).
Exhibitions and shows accompanied by field demonstrations the best method, Devadhar (222).
      Expert advice, proposed means for hastening adoption of, Burt (45); V. L. Mehta (104), 48,798; G. H. Desai (158); Ransing (389); Bhagwat (435); Kembhavi (463); Kothawala (477).

Experts must prove their usefulness, Naik (338).
      Extension advocated, Walchand Hirachand 51,796-7. Failure, examples of, G. H. Desai (158).
      on Farms of leading farmers the best method, G. H. Desai (158), 49,293.
      FIELD DEMONSTRATIONS:
             Economic survey of taluka needed first, Ransing (388), 50,749-53.
            Effectiveness of:
                   Hampering of, reasons and proposals for increasing, Ransing
                      (388-9).
                   Means of increasing, G. H. Desai (158); Devadhar (222-3); Naik (338); Goheen (497).
             Necessary, and proposal re working of, Kembhavi (463).
     Requirements for success, Burt (45).
Home projects, proposal, Goheen (496), (497).
Inadequacy of measures, Kothawala (477).
      Lantern shows, &c., illiteracy a bar to effectiveness of, Indian Merchants' Chamber, Bombay (511); Walchand Hirachand 52,118.
      Leaflets, magic lantern lectures or cinematographs advocated, Naik (338). Leaflets, pamphlets and lectures of little use, G. H. Desai (158).
      Literature should be in vernacular, G. H. Desai (196)
      Magic-lantern lectures and cinemas useful, Ransing (389-90).
Measures considered most successful, Kembhavi (463).
      Measures for influencing and improving practice of cultivators, Goheen
      Model farms within reach of cultivators, proposal, Peck (275):
      Non-official agencies, importance of use of, and extension desirable, Burt
          (45), 48,502-4.
     increased Propaganda, scope for, Kay 48,283, 48,323. Requirements for success, Sir L. S. Mehta (140). fundamental Research must precede, G. H. Desai (155).
      Rewards to cultivators doing propaganda work, proposal, Ransing (389). Staff, increase needed, Naik (338). Success, examples of, Burt (45-46); G. H. Desai (158); Ransing (387-8), (389); Bhagwat (434-5); Kembhavi (463); Kothawala (477). Taluka Agricultural Associations, see Agricultural Associations under
```

Superintendents, value of, Burt (45). Depressed classes:

Agricultural clubs for, proposal, Goheen (496), 51,703-4. Character below level of others, Peck 49,640. Co-operative movement, results among, Devadhar 49,481-5. no Co-operative societies known of, and failure of experiment, Peck 49,636-7, 49,665-6. Education of, conditions, Devadhar 49,494-6. in Salvation Army industrial schools, little interest in agriculture, Peck Intelligence and psychology of, Peck 49,633-5.

Welfare of Rural Population. constant Touring by Deputy Directors, Assistant Directors and Divisional

```
Depressed classes-contd.
```

National Baby and Health Week movement, work among, Devadhar 49,486-7.

Salvation Army work among, Peck 49,609-11, 49,618-9, 49,661-2. Sangli, change in outlook, Goheen 51,696-8.

Uplift of, attitude of other classes to, Peck 49,638-9, 49,644-6.

Work among, Devadhar 49,486-93. DESAI, Rao Sahib DADUBHAI PURSHOTTAMDAS, B.A., F.R.H.S., M.L.C., Nadiad: (312-321), 49,927-50,106.

Agricultural operations, 49,929-33, 49,960-4.

ADMINISTRATION:

Meteorological Department, service not satisfactory, (314). Policy, criticism of, as affecting agriculturists, (320). Postal service not satisfactory, (314).

Railways:

Damage to agricultural produce in transhipment from one gauge to another, 50,096.

Facilities not satisfactory, (314).

Tachines not satisfactory, (314).

Reduction of rates advocated, (314), 50,096.

Thefts, prevention advocated, (314).

Travelling charges for agricultural labour, lowering of, advocated, (314).

Wagons, improved supply advocated, (314).

Roads:

Improvement advocated, 50,098-101.

not Satisfactory, (314). Telegraph service not satisfactory, (314).

AGRICULTURAL DEPARTMENT:

no Co-operation between Civil Veterinary Department and, (317). increased Expenditure on, needed, 50,077-8, 50,081. Service not satisfactory, (314). Staff, increase advocated, 50,077.

AGRICULTURAL INDESTREDNESS:
Causes of, (314-5).
Measures for lightening burden of debt, (315).

AGRICULTURAL INDUSTRIES:

Cardboard making, investigation advocated, (319).
Cottage industry suitable to particular tracts should be introduced,

(319)

Factories for utilisation of bye-products desirable, (319). Home industries preferable to factories, (319). Industrial concerns, removal to rural areas not desirable, (319). Intensive study of rural industries advocated, (319).

Need for, (318).

Spinning, weaving, etc., desirable, (319). Straw, utilisation of, investigation advocated,

Time spent by cultivators on holdings, (318-9).

AGRICULTURAL LABOUR:

Concessions in railway rates to agricultural labourers advocated to

encourage migration, (319).

Uncultivated land, permanent migration of agriculturists to, proposed means of encouragement, (319).

Animal Husbandry:

Dairy industry: Buffaloes:

Breeding for milk should be undertaken, 50,043.

as Satisfactory as cows, 50,043.

Foreign, prohibition of import advocated, (318).
Higher butter fat percentage desirable, 49,957.
Casein products, starting of factories advocated, (318).
Development, scope for, (318), 49,956.

DESAI, Rao Sahib DADUBHAI PURSHOTTAMDAS—contd.

ANIMAL HUSBANDRY-contd.

Dairy industry-contd.

Ghi, prohibition of import advocated, (318), 49,957. High quality milk and milk products, demand for, 49,956. Obstacles to development, 50,045-8.

Railway rates on milk and butter, lowering of, advocated, (318).

Railway transport facilities, proposed improvements, (318).

Fodder:

Green deep rooted species of juar, investigation advocated, (318).

Irrigation facilities needed, (318), 50,050.

Shortage:

Causes, (318).
Periods of, (318).
Silage, cheap method needed, (318), 49,964-6.
decreased Yield, (318), 49,959.

Grazing:

Grass borders in tilled fields, decreasing and remission of assess ment on, provided for cattle of cultivators, proposed, (318). Pastures, deterioration in grazing value, (318). Gujarat, high level of efficiency, (318).

Improvement of breeds:

Advocated, by selection and cross-breeding with foreign types, (318).

Small dairy herds in each homogeneous tract, proposal, (318).

Co-operation:

Department, good work being done but increased funds needed, 50,079-83.

Government should encourage, by liberal provision of cheap capital, (319).

Movement not deeply rooted owing to want of education and lack of funds, (319). Societies, Government should issue loans to, at rate at which they

can borrow, (314).

Bajri, deterioration in quantity and quality, and causes, 49,946-8.

Cotton:

Cotton Transport Act, objections to, 50,060-Improved varieties, proceedings re, 49,976-82. 50,060-2.

Improvement, taxation for, without any tangible advantage, 50,048-9.

Introduction of exotic varieties, no serious attempt made, acclimatisation and hybridisation advocated, 50,040-2.

Introduction of improved seed, question as to profit to culti-

Introduction of improved seed, question as to profit to cultivators from, 50,071-6.

Research, little progress made, and reasons, (312), 49,975-82.

Damage by wild animals, issue of gun licences on liberal scale the only means of preventing, (317).

Deterioration in quantity and quality owing to want of proper cultural treatment of soil, and need for thorough investigation, (312-3), 49,946-8, 49,985-8.

Groundnuts, 50,014-6, 50,067-70.

Improvement:

Need for, and investigation of each crop advocated, owing to

deterioration, (317).

little Progress made by Agricultural Department and reasons, (312), 49,934-8, 49,974-82, 50,013-6, 50,063-5, 50,066. Trial plots, proposal, (312), 49,983-4, 49,949.

Juar, average yield per acre, 50,019. Sugarcane, non-growing of, in Nadiad district, owing to water difficulty, 49,943.

DESAI, Rao Sahib DADUBHAI PURSHOTTAMDAS-contd.

CROPS—contd.

Tobacco:

Experimental farm, 49,938, 49,951-2.
Experiments by Department and closing down of, and little progress made, 49,938.

CULTIVATION:

Mixtures and rotations, value known by people, but not resorted to where crop standardised, (317).

Tillage and cultural operations, neglect of, and reasons, (317).

EDUCATION:

Agricultural:

Agricultural school in every district, proposal, (313).

Poons College:
Practical training, inadequacy of, (313).
Students, after careers, (313).
Primary education in rural areas should have agricultural bias, (313).

Secondary school of agriculture and industry in each division, proposal, (313), (319).

Supply of teachers and institutions insufficient, (313).

Higher or collegiate, training in theory as well as practice of occupations and professions advocated, (319).

Primary, agricultural bias advocated, (319).

Secondary, technical and industrial bias advocated, (319).

EXPERIMENTAL farms, reasons for failure to influence cultivators, (313),

FERTILISERS :

Artificial, introduction needed, (316).

Bones and oil cakes, heavy export duty advocated, and factories
in India for manufacture of artificial fertilisers should be encouraged, (316).

Experiments needed for introduction of fertilisers to suit different soils, little done by Department, (316), 49,953-5.

Experiments by witness, 49,954.
Natural manure, deficiency in manurial properties, (316). must Pay financially, 49,954.

FINANCE:

Banking facilities, need for, for settlers on new land and proposal, (319).

Imperial Bank, revision of charter to enforce utilisation of reserves for development of agricultural industries and redemption of agricultural debts, advocated, (314).

Inadequacy of credit facilities and proposals for increase, (314),

(315).

Insurance Companies, prohibition of investing of money out of

India advocated, (314), 49,999-50,003.

Postal savings banks deposits, should be placed at disposal of cooperative societies of the district, (314). Taccavi loans, reduction, Government policy, (314).

HOLDINGS:

Consolidation

not Possible until sufficient industries started or doors of colonies opened to Indians, (315-6). increased Revenue demand, fear of, (315). Voluntary, advocated, 50,057-8.

Fragmentation:

Hindu Law of Inheritance the cause of, (315-6). possible Means of minimising loss from, (315-6).

Improvement of existing, preferable to introduction of new, under present conditions, (317), 49,944-5.

xxxviii

62471

DESAL Rao Sahib DADUBHAI PURSHOTTAMDAS—contd.

IMPLEMENTS—contd.

Indigenous, substitution of new implements not desirable, 50,026-50,029.

Introduction of new and improved, obstacles in way of, 50,028.

Requirements of various kinds of soils in Gujarat, no investigation made by manufacturers, 50,030-1.

Tractors desirable for particular purposes, and hiring out of, to cultivators by companies proposed, 50,095.

Gujarat, conditions in, and need for attention, (316), 49,989. in Sind, opposition to, 49,990-2.
Water table, Gujarat, lowering of, (318).

LAND REVENUE:

Assessment:

Concessions to settlers on new land advocated, (319). should be Reduced and made permanent, 50,010-12, 50,102-5. Reduction advocated in certain districts, 50,084-91.

Liberal policy, need for, (315).

Payment through village organisation, proposal, 49,967, 50,006-10.

Proportion of gross and net produce taken in, (315), 50,011, 50,018-25.

Re-modelling of policy necessary to remedy evil of fragmentation of holdings, (315).

LAND SYSTEM, tendency for agriculturists to become rent receivers. 50,106.

MIDDLE-CLASS MEN:

Attracting of, to agriculture, means of, (319). Reasons for non-taking up of agriculture by, (319-20).

NADIAD ASSOCIATION FARM, 50,032-9.

RESEARCH:

Control by Local Councils advocated, (314), 49,993-8. into Indigenous theory and traditional methods advocated, (312). Lack of continuity and settled policy, (312). Lines on which required, (312), (313). Provincial organisation with financial assistance from Central Government advocated, (313-4), 49,993-8.

Three experts working in co-ordination for each subject of study, advocated, (312) advocated, (312).

Tobacco experimental farm, 49,938, 49,951-2.

Soil:
Alkali, investigation of question by experts advocated, (316) Erosion from flood waters, construction of drains advocated, (316). Improvement, proposals, 50,102.
Reclamation, Government must undertake, private enterprise not Reclamation, Government must undertake, private possible, (316).
Survey advocated, (316).
Waterlogged, drainage advocated, (316), 50,102.

STATISTICS of consumption, compulsory supply of, not advocated, voluntary measures preferable, (321).

Tariffs, export duties on bones and oil cakes used as manure advo-cated, (314).

VETERINARY: Civil Veterinary Department:

Control by Director of Agriculture advocated, (317). no Co-operation between Agricultural Department and, (317).

Dispensaries no real Control by Local Boards and transfer to provincial authority advocated if worked efficiently and economically,

Expansion not adequate, (317).

DESAI, Rao Sahib DADUBHAI PURSHOTTAMDAS-contd.

VETERINARY—contd.

Legislation for segregation, etc., not advocated at present, (317), 50,004-5. Service not satisfactory, (314).

WELFARE OF RUBAL POPULATION:

Economic surveys:

Pardi taluka, results, 50,051-6.
not Necessary, material and statistics already possessed, (320-1).
Revival of old panchayat system desirable and agricultural atmosphere must be created, 49,967-73.

DESAI, Rao Bahadur GOVINDBHAI H., Naib Dewan, Baroda: (154-196), 49,032-49,303.

AGRICLTURAL INDESTEDNESS:
Causes of, (160), (196).
Credit, sources of, (160).
Moneylenders:

Advances from, preferred by cultivators to taccavi loans and reasons, (159-60).

Advantages of system to cultivators, (161). Evil of system, (159).

Keeping of accounts and giving of receipts, proposal, (161) 49,043, 49,113.
Licensing of, proposal, (161), 49,040-2, 49,224-8, 49,113.
Restrictions on, proposal, (161), 49,040-3, 49,223-8, 49,072.
Repayment, reasons preventing, (161).

AGRICULTURAL INDUSTRIES:

in Baroda, and measures taken by Government, (186).
Bee keeping, not found practicable in Gujarat, (186).
Co-operative organisation, proposal, 49,286.
Cotton ginning in Gujarat, (187).
Home industries for upper class women, proposal for development of, (187).

Indigenous fruits of Gujarat and scope for development, (186-7) Industrial concerns, removal to rural areas, starting of small industries on co-operative basis by villagers advocated, (187). Lac culture:

Extension, proposed means, (186).
by Forest tribes in Navsari district, (186).
Nature of, in Gujarat, (185).
Need for, 49,283-6.

Need 101, 43,200-0.
Oil pressing in Gujarat, (187).
Pisciculture, no scope for, in Gujarat, (186).
Poultry farming in Baroda, position, (186).
Power industries, in Gujarat, (187).
Preparation of agricultural produce for consumption, Government should establish, (187).
Prepagels (187). Proposals, (187). Religious sentiments, obstacle of, (185), 49,055.

Rice hulling in Gujarat, (187).

Sericulture in Baroda, attempted encouragement by Government, (186).

Sugar making in Gujarat, (187)

Time spent by cultivators on holdings and occupation during slack season, (185).

Vegetable growing in Gujarat, and scope for development, (186-7).

AGRICULTURAL LABOUR:

Attraction to areas where shortage, possible means, (187).
Attraction to uncultivated areas, proposed means, (188).
Migration, permanent, would be difficult to induce, (187), 49,298-9.
Shortage, and causes, (180), (187), (193).
Unskilled labourers, position improved, 49,090.

DESAI, Rao Bahadur GOVINDBHAI H .- contd.

```
ANIMAL HUSBANDRY:
     Buffaloes:
          Feeding of, (184).
          Prejudice against use of, for agricultural purposes, (183).
     Bullocks, feeding of, (184).
     Bulls:
          Castration:
                Secret carrying out of, in Baroda, 49,080-1, 49,085. considered a Sin by people, and propaganda re, (183),
                  49,081, 49,086.
         Let loose as an act of merit, damage done by, and castration advocated, (177), (183), 49,080-6.
     Co-operative cattle-breeding societies, success, not anticipated in Gujarat, (192).
     Dairy industry:
          Betterment, proposals for, (183).
Conditions in Gujarat, (183), (186).
Co-operative creameries would be useful, (183).
          Cream-separators, establishment in villages,
                                                                            (183),
                                                                                      (186),
             49,056-7.
           Village co-operative societies needed, 49,055.
          Wasteful methods, 49,055.
     Fodder:
          Crops:
                Nature of, 49,039.
                Replacement by commercial crops, 49,038.
                   reserves, organisation of co-operative societies for
          creation of, Baroda, (184).
Growing of leguminous fodders, proposal, (185).
          Lucerne, growing of, (185).
Problem of, 49,038.
          Shortage, period of, (185).
Silage, failure to persuade cultivators to adopt, (158), (184), 49,038-9, 49,280-2.
Stacking of, position re, and decrease, (184), 49,280.
Storing, need for improved methods of, (185).
          Supply, (184).
          Varieties used, (184-5).
     Grazing:
          Gaocharan lands, system in Baroda, 49,178-80.
          Gauchars (village commons), certain drawbacks of, but need for, (183-4), 49,273-5.
    Improvement of breeds:
          Baroda, steps taken, (182), 49,181-4, 49,216-21.
          Cattle-breeding by co-operative dairy societies, proposal, (183),
             49,217-8.
          Provision of sires by Government, proposal, (182).
          Scope for, (183).
    no Interest shown by zamindars and big landholders and proposed
     means of encouraging, (183). Pinjrapoles, 49,081.
```

Pure breeds, absence of, in Gujarat, (182).

CAPITAL, ATTRACTING OF:

Agriculture must be raised in public estimation, (193).

Obstacles in way of attracting men of capital and enterprise to agriculture as profession, (193-4).

Co-operation: Cattle-breeding societies, success not anticipated in Gujarat, (192). Consolidation of holdings through, in Baroda, 49,034-5. Credit societies, borrowing from sowcars and from, and evil of, (191).

DESAI, Rao Bahadur GOVINDBHAI H.-contd.

Co-operation-contd. an Economic movement but combination of social questions with, not objected to, 49,205.

Encouragement of growth of, by Government, proposal for, (190).

Few societies in Gujarat, and reasons, (161), 49,111-2.

Government functions re, proposed limitation, (190).

Improvement schemes, legislation to compel minority to join in, advocated, (192).

Improvement societies, value to be derived in Gujarat, (191).

Joint farming societies, success doubted at present, (191-2), 49,098-100. Non-official agencies: Constitution, criticism, and leaders should come from agricultural class, (190-1).

Devolution of powers from Government to, advocated, (190). for Purchase of household necessities, proposal, (191).

Restricted scope of, in Gujarat, (161). Results, (192). Sale and purchase societies, combination with credit societies advocated at first, (191).

Cotton, 1027, introduction of, (158). Crops and diseases in Gujarat needing investigation, (155).

by Stray cattle, and proposed measures re, (177-8), 49,080-6. by Wild animals and means of preventing, (177-8).

Improvement:

by Hybridisation, possibility of, (177): Provincial research programme, need for, (176). by Selection of seed, possibility of, (177).

Introduction of new:

Investigation, scope for, (178). possible Means of, (176-7). Kolam, introduction of, (158), (178).

Pests and diseases:

Investigation, need for, (155). Smut on bajri, investigation needed, (155).

White ant extermination, attention needed, (155).
Wilt in cotton, tobacco and groundnut, investigation needed, (155).

Protection:

from External infection, restrictions sufficient to avoid danger from importation, (179).

from Internal infection, restrictions, desirability, (179).

Seeds:

Distribution by Co-operative Societies the best system and extension advocated, (177).
Selection by farmers in some cases, (177).
Sugarcane, use of ammonium sulphate in Vyara taluka, (158), (176).

Deep ploughing, would be adopted if increased yields resulted, (178). Mixture of crops, practice of, in Baroda, (179), 49,046-9.
Rotation of crops, (179).
Tillage, little evidence of need for improvement of system, but

choice of suitable implements necessary, (178).

decreased Yield per acre, 49,134-46.

DEMONSTRATION AND PROPAGANDA:

Expert advice, means of inducing adoption of, (158).

Failure, examples of, (158).

on Farms of leading farmers the best method, (158), 49,293. Field demonstrations, means of increasing effectiveness, (158).

```
INDEX.
DESAI, Rao Bahadur GOVINDBHAI H .- contd.
     DEMONSTRATION AND PROPAGANDA—contd
            Leaflets, pamphlets and lectures of little use, (158).
           Literature should be in vernacular, (196).
fundamental Research must precede, (155).
           Success, examples of, (158).
     DEVELOPMENT DEPARTMENT, Baroda, particulars re. 49,197-201.
     EDUCATION:
           Adult,
                     night schools advocated, (157).
           Agricultural:
                 Agricultural bias in higher primary schools, particulars re,
                    (157).
                 Agricultural bias to primary and secondary education, desirable and proposal re, (192), 49,109, 49,172. in Baroda, history of, (156), 49,170-7.
                Continuation courses, proposal, (192-3).

"Home project" schools, American system, (156-7).

Incentive to study, Government service, (156), 49,170-1.

Interest in agriculture as a profession not a result of, (192), 49,287-92.
                in Middle and high schools, proposal, (192), (193).

Post-graduate, Government of India should provide facilities, (159).
                 Practical and theoretical training necessary, (156).
                 Schools needed, (155).
                Students:
                      After careers, (157).
Technical knowledge, no movement known of, for improving,
                Teachers:
                      Drawing of, from agricultural classes advocated as far as possible, (155-6).
                       Supply insufficient, (155).
          Illiteracy, lapse into, (193)
          Literacy, percentage of, in Baroda, 49,101.
Nature study, necessary in village schools, (157).
Policy in Baroda, 49,107-9.
          Primary:
                Compulsory, in Baroda State, working of, and results, (193).
                Small proportion of boys passing through fourth class, reasons,
                   (193).
          School farms:
                not Commercial farming concerns, (156).
                Necessary in village schools and suggestions for encouragement,
                   (157).
          School plots, necessary in village schools and suggestions for
   encouragement, (157).
Teachers, female, difficulty of obtaining, in Baroda, 49,106.
Training colleges, Baroda, 49,106.
EMIGRATION, (163), 49,088-9.
          Adulteration, proposed legislation, (175), 49,044-5.
Ammonium sulphate, use of, for sugarcane, in Vyara taluka, (158),
             (176).
          Artificial:
                Increased use of, scope for, (175).
Use of, factors of cost of, and selling price of crops, (175).
         Bonemeal:
         Factory in Nadiad, (176), 49,076-7.
Prejudice against, dying out, 49,078-9.
Use increasing, especially for fruit, (176).
Cowdung, use as fuel, means of preventing, (176).
Effect of phosphates, etc., lack of investigation, (176).
```

DESAI, Rao Bahadur GOVINDBHAI H .- contd.

FERTILISERS-contd.

```
Guarantees, not fulfilled, 49,044-5.
                Guarantees, not ruinlied, 49,044-5.
Natural, scope for increased use of, (175).
Night-soil manure, prejudice against, disappearing, 49,079.
Popularisation, means of, free supply to farmers for experiment and guarantee against loss, (176).
Potash manures, not successful, (176).
Sann, use of, for cotton and juar crop and trial for other crops suggested, (175).
FORESTS:
                  Baroda, 49,091.
                 Firewood and fodder, growing of Babul trees, proposal, and policy
                 in Baroda, (188).
Grazing facilities, Baroda, (188).
Village, creation of, policy in Baroda, and proposal re, (188).
FINANCE:
                Co-operation the best form for both long-term and short-term
                 finance, (159).
Facilities, need for increase, (159).
Land Mortgage Banks, advocated, (194-6).
                  Taccavi loans:
                                 Court loans:
Collection, rigidity of, (160).
Delay in obtaining, (160).
Drawbacks of system, (159-160), 49,222.
Issue through land mortgage bank or co-operative society, or by responsible officer on the spot, advocated, (160).
no Losses in Baroda, 49,133.
Description of the spot of
                                  Proportion of sum received by cultivators, (159-60).
                 Consolidation:
                                   Advantages to be derived, (170-1).
                                   Agricultural banking system necessary in conjunction with,
                                          (171).
                                 Baroda, work re, 49,034-5.
through Co-operative societies in Baroda, (191), 49,059-60.
proposed Encouragement by remission of land revenue for
                                proposed Encouragement by remission of land revenue for limited period, (191), 49,058-61.

Tried, but not found suitable, in Bombay, 49,118-21.

Essential for improvement of agriculture, (163), 49,035.

Government's duty in regard to, (171-2).

Hastening of work, need for, (196).

Leaders of the people, duty of, (172).

proposed Means of, (166-72), 49,246-60.

Measures taken in Baroda, (162), (163-4), (169-70), (191), (192), 49,248-51.
                                          49,248-51.
                               Ay,245-01.

Neglect of people to carry out, reasons for, (171).

Pre-emption, right of, proposal, (167), 49,246.

Re-arrangement on principle of economic unit and on basis of original ownership, possibilities of, and advantages of second method, (168), 49,252-60.

Restriction on sale of right of occupancy, proposal, (167).
                            Restripping:
                                                  Cost of, (170).
                                a Slow process, (170).
Voluntary, advocated, (169).
by Voluntary exchange, difficulties in way of, and proposed means of encouraging, (166-7), 49,247.
               Fragmentation:
                                Evils of, (162), 49,087.
Evils of, (162-3), (193), (194).
below Fixed limit, prevention of, measures taken in Baroda, (162), (163), (164), (166), 49,229-40, 49,245.
```

DESAI, Rao Bahadur GOVINDBHAI H.—contd.

Holdings-contd.

Fragmentation-contd.

Further, proposed measures for preventing, (164-6), 49,087. Sub-division, prevention below fixed limit advocated, and right of inheritance not affected, (164-6).

Legislation dealing with minors, widows, etc., not necessary, (172), 49,241-4.

IMPLEMENTS:

Adoption of improved, steps necessary for, (180).
Improved, use of, in Baroda, as result of education, 49,176-7.
Improvement of indigenous implements, need for investigation,

(180).Introduction of larger or better, improvement of cattle and con-

solidation of holdings needed for, (180).

Iron plough, advantages of, under certain conditions, (178-9).

Labour-saving implements, need for, (180), (188).

Investigation by, into local conditions in Baroda, 49,050-1. Studying of local conditions by, need for, (180).

Popularisation of improved implements, measures Baroda, (180-1).
Tools and implements in use in Gujarat, including Baroda, (179-80).

IMPROVEMENTS, factors discouraging landowners from carrying out,

Indian States, common action with British India as regards prevention of spread of animal epidemics, question of, 49,066-70.

IRRIGATION:

Black soil not suitable for, 49,115.

Canals, distribution of water:

Baroda system, (174). Regulation by Committee of local leaders, proposal, (174).

Gujarat, conditions in, and need for schemes, (172-3).

Indian Irrigation Commission, 1901-03, recommendations of, and non-carrying out of, (172-3).

Land would be acquired for cultivators, if necessary for water channels, 49,192-3.

Oil engines and accuracy accuracy and accuracy accuracy and accuracy accuracy and accuracy accuracy and accuracy accuracy accuracy accuracy and accuracy accuracy accuracy accuracy accuracy and accuracy accu

Oil engines and pumps, need for services of engineer to advise cultivators, (180).

River:

in Baroda, by use of bunds, (172).

Difficulties in, (172).
in Gujarat, need for schemes, (172-3), 49,039, 49,124-7.
Subsoil water, no charge for, if water below 40 feet, 49,122.
Tanks, Baroda, maintenance, 49,190.

Water divining by Major Pogson, results in Baroda, 49,075.

Water level, Baroda, 49,122-3. Water rates, crop basis and area basis in Baroda, 49,073-4.

Assistance of cultivators by State, Baroda, 49,191.

Baroda, system, &c., (173-4). Extension, obstacles in way of, (174). Persian wheel, (173). Scope for, in Gujarat, 49,116-7. Size and cost of (172.4)

Size and cost of, (173-4).

LAND REVENUE:

Exemption of improvements by cultivators in theory but not always in practice, (194). Improvements not charged for, 49,110, 49,194-6.

INDRX.

DESAI, Rao Bahadur GOVINDBHAI H .-- contd.

LAND REVENUE-contd.

Settlements:

Long period, improvements would be encouraged, (194). Period in Baroda, 49,110.

Narvadari system and drawback of, 49,300-3. Rack renting, legislation against, advocated, 49,296-7.

MARKETING:

RETING:
Billimor, Navasari District, system, (189).
Co-operative Societies should organise, (189).
Market Committees, proposal, (188-9), (189).
Standardisation of produce, need for, and proposal, (189), 49,092-4,

System in Gujarat and defects of, (188), (189). Weights and measures, need for standardisation, (189).

MIDDLE CLASS YOUTHS, taking up of agriculture by:
Granting of land free of assessment for certain number of years on
restricted (unalienated) tenure, proposal, (157).
Lack of land and capital, (157).

RESEARCH :

Co-ordination, need for, and proposed means, (155), (158-9). Crops and diseases in Gujarat needing investigation, (155). Financing of, by Provincial revenues advocated, (155).

into Indigenous methods necessary, (154).

Lines of work necessary, (154-5).

Popular beliefs should be collected and investigated, (154), 49,163-9, 49,071.

Provincial expert staff, need for, (159).
Provincial and regional basis advocated, (154).
Provincial research programme, need for, for local crops, (176).
Separation of function of experiment and research from that of demonstration, desirable in Baroda, 49,036.

Alkali lands, reclamation, difficulties, (174). Bunding of fields, in Baroda, 49,128-30.

Drainage:

Disservice, possibility of, (174).
Improvement from, (174).
Erosion, need for attention, (174).
Improvement, possible means of, (174).
Physical improvement, difficulty, (174).

Reclamation of cultivable lands gone out of cultivation, measures required, (175).

STATISTICS:

Literature should be in vernacular, (196). Unreliability of, (196).

TARIFFS:

Agricultural machinery free of duty, (189-90).

no Export duties on agricultural produce except on rice from

Rangoon, (190). prohibitive Export duties on bones and oil cakes advocated, (190).

Export duties on foodstuffs in Indian States, (190), 49,095-7.

Export duty on oil seeds, not advocated, disadvantages of, (190). no Special complaint, (189-90).

VETERINARY:

Civil Veterinary Department, control by Director of Agriculture advocated, (181).

DESAI, Rao Bahadur GOVINDBHAI H.—contd.

```
VETERINARY—contd.
             Contagious Diseases:
                   Legislation, would be unpopular at present, and education advo-
cated, (181).
                    Preventive measures in Baroda, and popularity of inoculation
                      increasing, 49,185-9.
             Dispensaries:
                   Control:
                              Local Boards, difficulties caused by, in Baroda (181),
                         bу
                            49,052-4.
                         by Provincial Authorities desirable, (181).
                   Touring, question of value of, (181).
             Preventive inoculation:
                   Extension, proposal, (181-2).
Fee not charged and should not be charged, (182).
                   Obstacles in way of, (182).
            Research:
                   Central organisation financed by provincial subsidies, proposal,
                      (155).
                   Provincial Institutions not necessary, (182).
                   into Rinderpest and hæmorrhagic septicæmia, need for, and should be undertaken by Central Government, (182).
            Serum:
                  no Delay or difficulty experienced in securing, (182). Supply in Baroda, 49,186-8.
      Veterinary surgeons, shortage, (181).
Welfare of Rural Population:
Area of land required to maintain family of three, 49,283-5.
            Area of land required to maintain family or three, 49,283-5. Baroda, work re, 49,212-4. Betterment, change in social outlook necessary, 49,203. Conditions of agriculturists, (196).

Department of Local Self-Government, scope for work by, and proposals re, (195), 49,062-5.

Health conditions, education and propaganda needed, (187). Physical condition deteriorated, 49,146.

Sanitary conscience, need for awakening, (187).
            Sanitary conscience, need for awakening, (187).
Social attractions of villages, need for increasing, (194).
            Social customs:
                  as Cause of indebtedness, (160), 49,148-51.
Propaganda against, in Baroda, 49,152-5.
            Social and economic surveys of typical villages:
in Baroda, 49,214.
            Need for, and proposals re, (195), 49,214-5.
Social workers, organisations at present, and extension desirable,
                49,156-62.
            Village leaders, importance of securing right type and proposals
            re training of, (195), 49,211-3.
Village libraries, Baroda, 49,206-10.
            Village life must be made more attractive, and proposed means, (195), 49,147.
            Village panchayats, scope for improvement of village life by, and proposal, (194-5), 49,062-5.
DEVADHAR, G. K., Provincial Co-operative Institute, Bombay: (219-44), 49,304-49,606.
      ADMINISTRATION:
            Conferences between heads of Departments, proposal, (238). Ports, need for increase, (223).
            Railways:
                  Agricultural demonstration train in Bengal and extension to other provinces advocated, (222), 49,321-2. special Facilities to agriculturists attending agricultural and
                      co-operative conferences and exhibitions advocated, (223-4),
                      49,514-21, 49,605.
                   Increase, need for, (223).
```

DEVADHAR, G. K .- contd.

ADMINISTRATION—contd.

Roads in interior, bad condition and need for improvement, (224). Steamship companies, special facilities to agriculturists attending agricultural and co-operative conferences advocated, (223).

AGRICULTURAL DEPARTMENT: greater Co-operation with Co-operative Department, need for, (223),

49,323-4. Subordinate staff, greater travelling facilities advocated, (223).

AGRICULTURAL INDEBTEDNESS:

Causes, (225-6), 49,375-6, 49,418-41. Credit, sources of, (226). Deccan Agriculturists' Relief Act:

Extension to all districts advocated, 49,589-91.

Value of, in lightening burden of debt and propaganda to make provision better known among agriculturists advocated, (226), 49,326-7, 49,549-50.

Expenditure on social functions and religious ceremonies and love of

jewellery, mainly among better class people, (226), 49,526-31, 49,544-5.

Measures for lightening burden of debt, (226).

Moneylenders:

Drawbacks of system, (224).

Kabulis, rate of interest charged, etc., (226), 49,442-4.

Mortgage and sale, restriction of right advocated in backward areas, (226), 49,592-3.

Mortgages, facilities for redemption, Repayment, reasons preventing, (226).

Rural insolvency, special measures not necessary, (226).

AGRICULTURAL INDUSTRIES

Buffalo keeping, would be profitable, and proposals for encouraging, 49,573-80.

Industrial concerns, removal to rural areas, co-operative running of, desirable, (232).

ntensive study of rural industries advocated, (232). Need for, 49,572.
Obstacles in way of development, (231).
Proposals, (231-2), 49,570-80.
Requirements for establishment, (231).

Time spent by cultivators on holdings and occupation during slack season, (231).

AGRICULTURAL LABOUR:

Attraction of surplus labour to areas with shortage, by better wages

and improved conditions of living, (232).

Colonisation of areas under Sukkur Barrage scheme, provision of land for poor cultivators and labourers advocated and scheme for working of, by co-operative societies, (233), 49,408-12, 49,532-5.

Development of uncultivated areas, proposals for, (233).

Shortage and causes, (232). Uncultivated cultivable land, means of attracting labour to, (232).

ALIENATION OF LAND ACT, PUNIAB, cleavage between agricultural and urban population created by, 49,551-3.

ANIMAL HUSBANDRY:

Advances by co-operative societies for purchase of cows, would be useful, 49,577-80.

Cattle-breeding by villagers, grants of land for maintenance would encourage, (231).

Co-operative cattle-breeding societies, difficulties in connection with, but good work done, (231).

Dairying industry: Betterment, proposed means of, (231).

Central instruction advocated, 49,509-13.

DEVADHAR, G. K .- contd.

ANIMAL HUSBANDRY-contd.

Dairying industry-contd.

Development by municipal or co-operative societies, advocated, (231).

Milk:

Buffalo, popularity of, 49,573-6.

Importance of supply of pure and cheap milk and products, (231).

Obstacles in way of improvement, (231). Fodder, co-operative fodder-storage societies advocated, (231).

Improvement of breeds:
Distribution of bulls, good results obtained, (230-1).

Lines on which required, (231). CAPITAL, proposed means of attracting, to agriculture, (240).

Co-operation :

Adult education, (222).

Bombay Provincial Co-operative Institute:

Economic inquiries carried out by, particulars re, (220),

49,310-2, 49,377-81. Functions, (237), 49,342. Funds of, and sources, 49,450-1.

Propaganda by, for organising new types of societies, proposal, (238).

Relations with Department of Education, 49,606.

Scholarships for students to visit other countries and provinces, proposal, (238).

Credit needs of agriculturists, extent to which met by, 49,325.

Credit societies:

Free Audit, proposal, (238).
Banwasi, particulars re, (243-4), 49,603-4.
Failure, causes of, where occurred, (240).
Financing of, (239).

Hadapsar, results, (239-40). Rate of interest charged by, 49,601-2.

Credit system:

widespread Development advocated, (224-5).
Increase in centres of distribution, need for, and steps being taken, (225). Position of, (224-5).

Department, greater co-operation with Agricultural and Veterinary

Departments, need for, (223), 49,323-4. Educative effect, value of, 49,341. Encouragement of growth of movement, proposed measures for, (238-9), 49,450-1.

Fodder-storage societies, advocated, (231). Irrigation societies, assistance by loans, etc., proposal, (228).

Joint farming societies, difficulties, (239).

Joint improvement societies, compulsion on minority advocated by

Provincial Co-operative Conference, 1923, (239).

Land Mortgage Banks, Government guarantee of bonds or debentures, proposal, (239).

Non-credit societies, position, 49,405-7.

Non-official agencies:

Encouragement of, and policy of devolution of functions to, and extension of policy advocated, (237-8), 49,342-60, 49,536-7.

Value of, but official element also needed, 49,413-7.

Phenomenal success of movement, (235-7), 49,340.

Position in Bombay and the Punjab, comparison, 49,343-58, 49,445-9.

Principles, theory and practice, teaching of, in schools, proposed, (221).

DEVADHAR, G. K .- contd.

```
Co-operation-contd.
```

Rate of interest on loans, opinions re, 49,601-2.

Registrar:

Appointment, opinion re, (238-9).
Deputies or Assistants, visits to foreign countries, proposal, (238).

Transfer of powers and functions to Deputies or Assistants, proposal, (238), 49,360.

Results, (239-40), 49,481-5.
Sale societies, manure sale through, in certain districts, (229-30).
Schoolmasters, proposed classes for 49,454.

in Sind, progress and success of, (236), 49,534-5.

Societies:

for Erection of dams near creeks, and proposals for extension, (229).
for Improvements, success of, in Dharwar and Kanara

districts, (239). for Social or marriage reforms, thrift, etc., not common and

reason, (239).

for Supply of implements on hire or hire-purchase system,
success of, and extension advocated, (230).

Staff, subordinate, qualifications advocated, (239).

Supervision of societies, means of, and need for larger funds, 49,452-4.

Taluka development associations: (223), 49,324.
as Centres of social service or community service, possibility, 49,403.

Extension of scope, proposals, 49,460-8, 49,477. Relations with Provincial Institute, 49,400-2, 49,458-9.

System, method of working, financing of, etc., 49,456-66. Value of movement in promoting welfare of the masses, (235-7). Work of societies for uplift of conditions in rural areas, 49,478-85.

CROPS:

Damage by wild animals:

Co-operative fencing societies, proposal, (230).
Grants of seasonal licences for guns through co-operative

Grants or seasonal licences for guns through co-operative societies, proposal, (230).

Improvement, local associations or co-operative societies the best agency for, (230).

Introduction of new, local associations or co-operative societies the best agency for, (230).

Locusts, (230).

Protection:

Preventive measures should be ready in advance, example of unpreparedness of Department, (230).

Propaganda necessary in favour of adoption of prevention methods against diseases, (230).

Seeds:

Distribution, local associations or co-operative societies the best

agency for, (230). Rewards for good quality seeds, proposal, (230).

CULTIVATION:

Dry crop, students should be sent to other countries to study, (230).

practically no Margin of profit, 49,437-41. Production, rise in cost of, 49,418-30. DEMONSTRATION AND PROPAGANDA:

on Cultivators' fields, proposals, (222-3).

Demonstration train in Bengal and extension to other provinces advocated, (222), 49,321-2.

Exhibitions and shows accompanied by field demonstrations the best method, (222).

1

```
DEVADHAR, G. K .- contd.
                                                                                                                               100
       EDUCATION:
               Adult:
                            Co-operative movement, (222).
                       Difficulties in connection with, (221).
                       Failure of movement, reason for, 49,392.
                     Failure of movement, reason for, 49,392.
Importance of, (221).
Incentive of economic results, 49,546-8.
Kathakathas, 49,396-9.
Movement started by Sir Vithaldas Thackersey, reasons for abandonment, 49,393-4, 49,503-4, 50,503-4.
Night schools, causes of failure, (222).
Popularisation, proposals for, (221-2), 49,395-9.
Prospects, 49,504-7.
for Women, need for, and proposals, (222), 49,318.
               Agricultural:
                      Apprenticing of young men to large and well-managed private estates, proposal, (221), 49,524-5, 49,542-3.

Co-operation, principles, theory and practice should be taught.
                          (221).
                      Demand for, nature of, 49,386-7.
                      Facilities, inadequacy of, (220).
Grants to private high schools, proposal, (221).
in High schools, proposal, (221), (240).
Lack of interest in agriculture due to absence of facilities,
                          49,581-8.
                      Nature of instruction advocated, (221).
                      in Primary schools:
                              Number of agricultural classes and pupils, (220).
                      Proposal, (220), (240), 49,388-91.
Proposals, (220-1).
                      Schools:
                              Assistance by donations and contributions and encourage-
                                 ment desirable, (220), (221).
                             Attendances, means of improving, (221). Demand for, (220), (221). Increase in number advocated, (220).
                              Nature of instruction in, 49,313.

Nature of instruction proposed, (221).
              Teachers, drawing of, from rural areas advantageous, but others should not be excluded if qualified, (220-1).

Vernacular schools, facilities, (220).

Compulsory, position re, 49,382-5, of Depressed classes, conditions, 49,494-6.

Director of Public Instruction, relations with Provincial Co-operative Institute 40,606
               tive Institute, 49,606.
Female, small demand for, 49,319-20.
              Graduates of Arts, Agricultural and Commerce Colleges, prospects,
               Schoolmasters, attendance at co-operative secretaries' training
                  classes, proposal, (239), 49,454.
       Famine, conditions re, 49,431-4.
```

```
Adulteration, means of preventing, (229).
Cowdung, use as fuel, and means of preventing, (229).
Natural manure, scope for increased use of, (229).
Night soil, scheme for utilisation, (229).
Rab, facilities to agriculturists to obtain, from forests advocated, (229).
 Sale through co-operative societies in certain districts, (229-30).
```

Cheques, increased use of, advocated, (225).

DEVADHAR, G. K .-- contd.

FINANCE-contd.

Credit system for period ranging between five and ten years desirable, (224). Facilities for agriculturists, defectiveness of, (224).

Taccavi loans:

Defectiveness of system, (224).

Issue through Co-operative movement, desirable and proposals for encouragement, (225), 49,404.

Forests:

Co-operative firewood societies or forest panchayats, proposed forma-

tion, (233).
Fodder and firewood supply, proposals for increase, (233).

Green manure supply from, proposal for increasing, (233).

Consolidation:

Compulsory on minority advocated, (227).

Disputes arising from, must be kept out of Courts, (227).

Obstacles in way of, (227).

by Voluntary barter or exchange, propaganda advocated, with special assistance or concessions from Government, &c., (227).

Fragmentation: Evils of, (227). Joint cultivation would minimise loss due to, (227).

Co-operative societies for supply of, on hire or hire-purchase system, success of, and extension advocated, (230).

Hire-purchase system, desirability dependent on value of imple-

ments, 49,597-8. Introduction of new and improved, proposed means of hastening,

Local manufacture, reduction of import duty on iron, and provision of railway facilities for transport, would encourage, (230).

Repair facilities and provision for supply of spare parts advocated,

(230).IMPROVEMENTS, factors discouraging landowners from carrying out, (240).

Co-operative societies for, assistance by loans, &c., proposal, (228). District Local Boards, power to, to undertake irrigation schemes, proposal, (228).

Districts where extension of facilities needed, (227), (228-9). Major schemes, annual loss on, (228).

Protective schemes, need for extension and change in Government policy as regards expenditure advocated, (228-9), 49,328-31. Tanks:

Chain of, scheme for, in Deccan districts, (227-8), 49,331. Value of, (227-8).

Wells, expert advice needed by cultivators, (228).

RACK RENTING, prevention by law would be approved, 49,596.

MARKETING:

Arecanut sale societies, success of, (234).

Co-operative sale societies or unions:

Co-operative finance must go hand in hand with, (234).

Formation advocated, (233-4). Government assistance, need for, and proposals, (234.5). in the Karnatak, working of, (234).

Cotton, success of co-operative sale societies, (234).

Dalals or agents of middlemen, proposed formation of associations to regulate conduct of, (234), 49,338-9.

Grading officers, Government appointment of, would be approved, 49,599-600.

Grain sale society, Sukkur, (234). Gur sale society, Poona, (234).

DEVADHAR, G. K.—contd.

MARKETING-contd.

Improvement, proposals for, (234).

Information as to world markets and markets in country, proposal re, (235).

Potato sale society, Sind, (234).

System, defects of, (233-4).

Weights and measures, uniformity advocated, (234).

MIDDLE-CLASS MEN, causes of lack of interest in agriculture, 49,581-8.

Research:

Boards of Rural Economic Inquiry, scheme for formation of, in each province, (219-20), 49,307-9.

Institutions and staff of experts, maintenance by Government of India, (223).

Provincial Governments should be encouraged and assisted to carry on, (223).

Erection of dams near creeks, possibility of protection of land from erosion by influx of salt water, and proposals for encouragement, (229).

Productive capacity, deterioration, 49,375-6.

STATISTICS, crop returns, collection by village officials, suggestion for improvement, 49,539.

VETERINARY DEPARTMENT:

greater Co-operation with Co-operative Department, need for, (223), 49,323.

Dispensaries:

Location near to cattle market, desirability of, (230)

Practical demonstration and practical results would increase use of, (230).

Welfare of Rural Population:

Boards of Rural Economic Inquiry, formation of, in each province advocated, and scheme for, (219-20), 49,307-9.

Co-operative societies' work for uplift of conditions, 49,478-85.

Depressed classes, work among, 49,486-93.

Economic inquiries by Bombay Provincial Co-operative Institute, particulars re, (220), 49,310-2, 49,540-1.

Gymnasiums and sports, proposal, (232), (242), 49,363.

Improvement of health conditions, proposed measures for, (232),

(241-2).

Midwives, system of, and need for extension, 49,362, 49,370-4. National Baby and Health Week Association, 49,322-7. National Baby and Health Week movement, work among depressed

classes, 49,486-7.

Non-official agencies, particulars re present work of, and proposals for extension, (242), 49,366-74, 49,453-77, 49,522-3, 49,538-9, 49,541, 49,556-69.

Poona Seva Sadan Society, work, (242), 49,368-72. Problem of, (240-1). Servants of India Society, work, (242), 49,366-7.

Servants of Rural India Society as adjunct to Servants of India Society desired, 49,473.

Social service or community service, need for development of spirit

of, (241).

Village First Aiders, system and extension advocated, (242), 49,361-2.

Village libraries and clubs advocated, (242), 49,505-6.

Village panchayats, number limited and funds inadequate, (241-2). Wrestling, proposals for encouragement, (242), 49,497-502.

Dispensaries, see under Veterinary.

District Local Boards:

Administration of education by, advocated, Naik (337).

Control of dispensaries by, see under Veterinary.

Power to, to undertake irrigation schemes, proposal, Devadhar (228).

SURAT:

Funds, inadequacy of, Naik 50,114-7.

Management of education not yet taken over owing to lack of funds, Naik 50,128-31.

Subjects in which interested, Naik 50,118-21.

Taxable resources, further development not possible, Naik 50,116-7, 50,127.

Education:

Administration by Local Boards advocated, Naik (337).

in Co-operative movement, Devadhar (222).

Co-operative movement should be associated with, V. L. Mehta 48,859-61, 48,935-6.

Definite system needed, Sir L. S. Mehta (140). Difficulties in connection with, Devadhar (221). Failure of movement, reason for, Devadhar 49,392.

Farmers, no facilities, Nagpurkar (367).

Importance of, V. L. Mehta (103); Devadhar (221).

Incentive of economic results, Devadhar 49,546-8.

Kathakathas, Devadhar 49,396-9.
Need for, by oral instruction and on demonstration farms. Nagpurkar 50,578-9.

Night schools:

Advocated, G. H. Desai (157).
Failure, causes of, Devadhar (222).

Proposal, Naik (337); Kothawala (487).

Popularisation, proposed means of, Devadhar (221-2), 49,395-9;

Ransing (387); Kothawala (477), (487); Goheen (497).

Proposal, V. L. Mehta (115).

Proposal, V. L. Menta (119).

Prospects, Devadhar 49,504-7.

in the Punjab, V. L. Mehta (103); Ransing (387).

Short courses advocated, Bhagwat (434).

Short courses advocated, Bhagwat (434).

Work of Sir Vithaldas D. Thakersey, and abandonment of, V. L.

Work of Sir Vithaldas D. Thakersey, and abandonment of, V. L.

Mehta Mehta (103), 48,653-6, 48,858-61, 48,899-902; Sir L. S. Mehta (140), 48,955-8; Devadhar 49,393-4, 49,503-4.

AGRICULTURAL:

Agricultural bias schools, G. H. Desai (157); Ransing (386); Gordon (418); Bhagwat (433); Goheen (496); Walchand Hirachand (418); *I* 51,958-61

Agricultural bias to primary and secondary education, desirable and proposal re, G. H. Desai (192), 49,109, 49,172; D. P. Desai (319); Naik (340).

in All colleges, as optional subject, advocated, Kothawala (489). Apprenticing of young men to large and well-managed private estates, proposals, Devadhar (221), 49,524-5, 49,542-3.

Attendances:

Applications in excess of vacancies, Naik (337).

Fairly good, but could be increased by propaganda, Gohcen

Inadequacy of, and means of increasing, Ransing (386). in Baroda, history of, G. H. Desai (156), 49,170-7. Colleges:

Lyallpur, students from Sind sent to, formerly, but abandonment owing to charge of full cost by Punjab Government, Mann 48,624-8.

```
INDEX.
Education-contd.
       {f A}GRICULTURAL—contd.
               Colleges—contd.
                      Poona :
                             Opinion re training at, Nagpurkar 50,556-60.
Practical training, inadequacy of, D. P. Desai (313); Nag-
                               purkar 50,450.
                                     After careers, D. P. Desai (313).
not Fitted to be managers of big estates and proposal refurther training, Ransing (387), 50,743-5.
                                    Jalgaon farm training scheme and failure of, Ransing (387), 50,740-5. from Sind, Mann 48,623-4.
                      Sind:
             Movement for, Mann 48,566, 48,599.

Need for, and proposal re, Mann 48,566, 48,599, 48,624-30.

Continuation courses, proposal, G. H. Desai (192-3).

Control by Agricultural Department advocated, Kothawala (477).

Co-operation, principles, theory and practice should be taught, Devadhar (221).
              Defects of present system, and requirements, Nagpurkar (367), 50,450.
             Demand for, greater in irrigated than in dry areas, Bhagwat 51,207-10.
              Demand for, nature of, Devadhar 49,386-7.
             Facilities:
             Inadequate, Devadhar (220); D. P. Desai (313); Naik (337);
Ransing (386); Kothawala (476), (486); Goheen (495-6).
Need for increase, Naik (337); Ransing (386); Kothawala (477).
Present, Bhagwat (432-3):
Government farm in each taluka advocated, Kothawala (477),
                 51,586-9.
              Graduates, preference in Government service advocated, Naik (337).
         Grantiates, preference in Government service advocated, Nata (337).
Grantis to private high schools, proposal, Devadhar (221).
in High schools, proposals, G. H. Desai (192, 193); Devadhar (221), (240); Goheen (502), 51,721-2.
in Higher or collegiate education, proposal, Kothawala (484).
"Home project" schools, American system, G. H. Desai (156-7).
Incentives to study, Sir L. S. Mehta (139); G. H. Desai (156), 49,170-1; Naik (337); Nagpurkar (367); Kothawala (486-7); Goheen (496)
                 (496).
             Interest in agriculture not a result of, G. H. Desai (192), 49,287-92;

Kembhavi (462-3), 51,475, 51,515-6.
             Kolhapur Farm School, particulars re, Goheen 51,687-90.
             back of interest in agriculture due to absence of facilities, Devadhar
                 49.581-8.
             Manjri, short courses at, and value of, Walchard Hirachard 51,857-9, 51,920-4.
             in Middle schools, proposal, G. H. Desai (192, 193); Kothawala (484),
            (489); Goheen (502).

Model school put up at Poona Agricultural Show, extension advocated, Mehta 48,793-7.

Nature of instruction advocated, Devadhar (221).
             Post-graduate, Government of India should provide facilities, G. H.
                 Desai (159).
             Practical and theoretical training necessary, G. H. Desai (156).
```

in Primary schools: In Primary schools:
 Number of agricultural classes and pupils, Devadhar (220).
 Proposals, Devadhar (220), (240), 49,388-91; D. P. Desai (313);
 Kembhavi (463); Kothawala (484), (486), (487), (489); Goheen (502); Indian Merchants' Chamber, Bombay, (511); Walchand Hirachand, 51,801-6, 51,956-7.
 "Project" method, proposal, Goheen (496), 51,722.

```
Education—contd.
```

AGRICULTURAL—contd.
Proposals, Devadhar (220-1); Ransing (385-6); Bhagwat (433), (434), (445-6); Goheen (502).
Re-direction of rural education, need for, Sir L. S. Mehta (139).
Requirements in irrigated and dry areas, Bhagwat (433), 51,228-33. Assistance by donations and contributions and encouragement desirable, Devadhar (220, 221). Attendancés: Insufficient, Bhagwat (433).
Means of improving, Devadhar (221). Bijapur district, under consideration, Kembhavi 51,563, 51,571. Demand for, Devadhar (220, 221).
Devihosur, sons of middle class people not attracted to, Kemb-havi 51,563-70. Dhulia, particulars re, Ransing (385), (388), 50,634-64, 50,728-9. in Every district, proposal, D. P. Desai (313); Ransing (385-6). English education needed, Ransing 50,657-8; Kembhavi 51,563-70. Increase in number advocated, Devadhar (220).

Loni, Devadhar 49,314-7.

Appreciated by people owing to scholarships, Bhagwat 51,382-4. Satisfactory but longer course desirable, Goheen 51,684-5, 51,700. of Loni type, extension advocated, Goheen (496).

Nature of instruction in, Devadhar 49,313.

Nature of instruction proposed, Devadhar (221).

Needed, G. H. Desai (155).

Objection to, Bhagwat (445).

in Secondary schools advocated, Kembhavi (463).

Secondary school of agriculture and industry in each division, proposal. D. P. Desai (313) (319). posal, D. P. Desai (313), (319). Short courses: for Adults, scope for extension, Walchand Hirachand 51,925.
at Agricultural College, public should be better informed of,
Walchand Hirachand 51,963-5.
at Manjri Experimental Station, Bhagwat 51,224-5.
Useful, Bhagwat (433), 51,224-7. Special facilities for agricultural areas advocated, Sir L. S. Mehta (139).Students: After-careers, G. H. Desai (157); Naik (337); Bhagwat (433);
Kothawala (477), (487); Goheen 51,695, 51,732-4.
Source of, Naik (337); Kothawala (477), (487); Goheen (496).
Technical knowledge, no steps known of, for improvement, G. H.
Desai (157); Naik (337).
Taking up of, with view to sticking to agriculture, not only for
Government posts, advocated, Sir L. S. Mehta 48,945-6. Teachers:

chers:
Drawing of, from agricultural classes:
Advantageous, but others should not be excluded if qualified, Devadhar (220-1).
Advocated, Kothawala (477); Goheen (496).
Advocated as far as possible, G. H. Desai (155-6); Naik (337).
Opportunities should be given to agricultural classes to qualify as, but no class distinctions should be made in making appointments, Sir L. S. Mehta (139).
Limitation to agricultural classes undesirable. Ransing (386) Limitation to agricultural classes undesirable, Ransing (386),

50,713-4.

Supply insufficient, G. H. Desai (155); D. P. Desai (313); Naik (337); Ransing (386); Kothawala (476), (486); Goheen (495-6).

Training of, at Dhulia Agricultural School, proposal, Ransing (386).

```
Education-contd.
```

AGRICULTURAL—contd.

Teachers—contd.

in Village schools, should be drawn from agricultural classes,

Kothawala (486).

Technical training, increased facilities needed, Kothawala (487).
Vernacular schools, facilities, Devadhar (220).
general Attitude re, a desire for training for something other than agriculture, Gordon (417-8), 51,149-50.

Continuation classes advocated, Naik (340).
Co-operation, instruction re, in schools, proposal, Devadhar (221).
Danish Folk High Schools, institutions of type of, but more modest in aims, proposal, V. L. Mehta (115), 48,937.
Demand for, greater in irrigated than in dry areas, Bhagwat 51,207-10.

of Depressed Classes:

Conditions, Devadhar 49,494-6.

in Salvation Army industrial schools, little interest in agriculture, Peck (274).

Director of Public Instruction, relations with Provincial Co-operative Institute, Devadhar 49,606.

Director of Public Instruction, relations with Provincial Co-operative Institute, Devadhar 49,606.

Female, small demand for, Devadhar 49,319-20.
Financing of, proposals, Naik (337); Kothawala (477).
Graduates of Arts, Agricultural and Commerce Colleges, prospects, Devadhar (240). Higher or collegiate:

Agricultural education, see under Agricultural above.

Training in theory as well as practice of occupations and professions advocated, D. P. Desai (319).

Difficulties caused by, Bhagwat (431); Indian Merchants' Chamber,

Bombay (511).

Lapse into, G. H. Desai (193).

proposed Means for preventing, V. L. Mehta (115), 48,937;

Ransing (387).

Tendency declining, Mehta (114-5), 48,781-2.

Improvement, importance of, Kothawala (486).

Interest in agriculture and industry destroyed by present system,

Bhagwat (445).

Interest of agriculturists alienated to other avocations, Kothawala (489).

LITERACY:

Increase in proportion, Bhagwat 51,211. Percentage of, in Baroda, G. H. Desai 49,101. Small percentage of, Sir L. S. Mehta (139).

NATURE STUDY:

Advocated, Walchard Hirachard 51,804-5; Kothawala (477), (484). Importance of, Naik (337). Necessary in village schools, G. H. Desai (157). Value of, Goheen (496). Policy in Baroda, G. H. Desai 49,107-9.

PRIMARY:

Agricultural education, see under Agricultural above.

Advocated, Kirloskar Brothers (355). in Baroda State, working of, and results, G. H. Desai (193), 49,101-6.

Free

Advocated, Kothawala (485); Walchand Hirachand 52,073-5. Importance of immediate and universal introduction, V. L. Mehta (114). Position re, Devadhar 49,382-5.

Time not ripe for, Nagpurkar (373).

Necessity and importance of spread of, Indian Merchants' Chamber,
Bombay (510-11); Walchand Hirachand 51,798-9.

Education-contd.

```
PRIMARY-contd.
                Popularisation of, proposed means, Sir L. S. Mehta (143).
Poverty a reason for withdrawal of children from, Sir L. S. Mehta
                     (143).
                Reason for small proportion of boys in schools, Kothawala (485).
       Small proportion of boys in schools, Abthawaia (485).

Small proportion of boys passing through fourth class, reasons,

G. H. Desai (193); Naik (340); Bhagwat (447).

Proposals, (447).

Provision of cheap agricultural literature advocated, Naik (340).

Rural bias advocated, V. L. Mehta (114-5).

Salvation Army work among depressed classes, Peck 49,609-11, 49,618-9,

40 661-9
       Sangli Industrial and Agricultural school, particulars re, Goheen 51,686-7, 51,691-8, 51,699, 51,729-35.
Scheme, proposal, Bhagwat (434), (445-6), 51,404-5.
School Farms:
Advocated, Kothawala (477).
       not Commercial farming concerns, G. H. Desai (156).
Importance of, Naik (337).
Necessary in village schools and suggestions for encouragement,
G. H. Desai (157).
Value of, Goheen (496).
School Plots:
       Advocated, Kothowala (486).
Importance of, Naik (337).
Necessary in village schools and suggestions for encouragement,
G. H. Desai (157).
Proposal re, Kothawala (487).
Value of, Goheen (496).
Schoolmasters, attendance at co-operative secretaries' training classes,
            proposal, Devadhar (239), 49,454.
        SECONDARY:
       Agricultural teaching in, see under Agricultural above.

Agricultural plots advocated, Naik (337).

Technical and industrial bias advocated, D. P. Desai (319).

Spinning and weaving, proposals, Kothawala (488); J. K. Mehta 52,143.

Starting of schools financed partly by co-operative bodies and State and local authorities, resolution of Provincial Co-operative Conference Mehta (102)
            ence, Mehta (103).
       ence, Metta (103).

System, Bhagwat 51,276-7.

Teachers, female, difficulty of obtaining, in Baroda, G. H. Desai 49,106.

Technical, proposal, Bhagwat (433-4), (442), (445-6), 51,385-8.

Training colleges, Baroda, G. H. Desai 49,106.
        University students, as rural leaders, question of, Sir L. S. Mehta
        Veterinary, proposals for improvement, Kembhavi (467).
Village schools with farms attached, proposal, Kothawala (477).
Emigration, G. H. Desai (163), 49,088-9.
Excise revenue, comparison with land revenue, Gordon 51,168-9A.
Famine, conditions re, Devadhar 49,431-4.
Fartilisars:
        Adoption, economic factor, Sir L. S. Mehta (142).
        ADULTERATION:
                 no Adulteration by merchants, small amount possible by petty men,
                     Nagpurkar 50,588-96.
                 Means of preventing, proposals:

Legislation, G. H. Desai (175), 49,044-5; Nagpurkar (380), 50,587-94; Kembhavi (465).

Provision for speedy analysis of samples, and legislation,
                              Bhagwat (438).
                         Sale through taluka development associations or co-operative
                              societies or credit societies, Devadhar (229).
```

Fertilisers—contd.

ARTIFICIAL:

too Costly for dry crops, Naik (339). Increased use of, scope for, G. H. Desai (175); Kothawala (480):

Goheen (497). Introduction needed, D. P. Desai (316).

Manufacture in India:

by most Modern and cheapest methods advocated, Nagpurkar

not Possible at present, Kembhavi (465).
Use should be encouraged as supplemental to natural manures,
Bhagwat (438).
Use of, factors of cost of, and selling price of crops, G. H. Desai

 $(175)^{'}$.

Use of, risky for dry crops, Nagpurkar 50,522. Value of, Nagpurkar (369-70).

for Bajri:

Investigation of question and further experiments needed, Nagpurkar 50,460-4. not Profitable without sufficient rainfall, Nagpurkar 50,460.

BONEMEAL:

Pactory in Nadiad, G. H. Desai (176), 49,076-7. Prejudice against, dying out, G. H. Desai 49,078-9. Use increasing, especially for fruit, G. H. Desai (176).

Bones and Oil Cares:
heavy Export duty advocated and factories in India for manufacture of artificial fertilisers should be encouraged, D. P. Desai (314), (316).

Prevention of export advocated, Nagpurkar (370).

Castor cake, adoption of, as manure for cotton in Khandesh district, Ransing (389).

Co-operative organisation of sale, proposal for, V. L. Mehta (108-9).

Cowdong, use as fuel; Devadhar (229); Kothawala 51,661-2.

Means of preventing:

Cultivators should be allowed fuel from waste lands, i.e., trees growing in waste lands should not be auctioned, Kothawala (488).

Education and propaganda, G. H. Desai (176); Kembhavi (465); Goheen (498).

Forest Department should increase plantation of trees useful for fuel and provide facilities for easy distribution, Bhagwat

Free supply of fuel from forests, Nagpurkar (373), 50,597.

Fuel depots, opening of, for cheap fuel, Devadhar (229).

Increase of grain crops, stubble could be used for Nagpurkar (373).

Propaganda and supply of cheaper fuel from forests with cheap railway rates, Naik (339).

Propaganda useless without provision of substitute, Bhagwat (438).

Planting of suitable fuel and timber-bearing trees, Goheen (498).

Release of trees of small forests for fuel, Kembhavi (465).

Research into suitable fuel trees advocated, Goheen (495).
Supply of cheap fuel, G. H. Desai (176); Bhagwat (438).
Supply of another fuel as cheap and as readily available, neces-

sary, Nagpurkar (370), should be Prevented, Kothawala (480), (481), 51,663-7. Taking of, to field should be compulsory, Kothawala (481). for Dry crops, investigation needed, Nagpurkar 50,455-7.

Fertilisers-contd.

Experiments needed for introduction of fertilisers to suit different soils, little done by Department, D. P. Desai (316), 49,953-5.

Experiments by witness, D. P. Desai 49,954.

FARMYARD:

Increased supply, proposals for, Nagpurkar (370).
Storage and use of, investigation and instruction of cultivators advocated, Goheen (497-8).

Fisheries and fish oil manufacture, encouragement advocated, Nag-purkar (370).

Free supply to farmers for experiment and guarantee against loss, proposal, G. H. Desai (176).

GREEN MANURE:

Encoursgement advocated, Nagpurkar (370).
Extended use of, advocated, Naik (339).
from Forests, proposals for increasing, Devadhar (233).
Growing of, should be encouraged, but full water rates charged,
Walchand Hirachand 52,071-2.

Sann:

becoming Popular in certain talukas, Naik (339).

Use of, for cotton and juar crops and trial for other crops suggested, G. H. Desai (175).

Guarantees, not fulfilled, G. H. Desai 49,044-5.

Importance of question, Nagpurkar (370).

Increase in use of, as result of work done by Messrs. Parry and Co., Kembhavi (465).

NATURAL:

URAL:
Advantages of, as compared with artificial, Naik (339).
Conservation, need for, and proposals, Kembhavi (465).
Deficiency in manurial properties, D. P. Desai (316).
Increased use of, scope for, G. H. Desai (175); Devadhar (229);
Kothawala (480); Goheen (497).
Insufficiency, Naik (339); Kothawala (488).

Proposals for encouraging use of, Kothawala (481).

Sheep-rearing, need for encouragement and proposed means,

Nagpurkar (370).

Value of, Nagpurkar (369-70).

NIGHT SOIL:

Poudrette, encouragement advocated, Nagpurkar (370), 50,500-7. Prejudice against, disappearing, G. H. Desai 49,079. Utilisation, scheme for, Devadhar (229).

OIL CARE:

OIL CAKE:
Increased use of, Nagpurkar 50,523.
Supply, Kembhavi (465).
must Pay financially, D. P. Desai 49,954.
Phosphates, etc., effect of, investigation not sufficient, G. H. Desai (176); Nagpurkar (370); Kembhavi (465).
Phosphates and potash, experiments in the Deccan not successful but

more investigation necessary, Bhagwat (438).

Popularisation, proposed means of, V. L. Mehta (108-9); G. H. Desai (176); Naik (339); Nagpurkar (370); Bhagwat (438); Kembhavi (465);

Kothawala (480).

Potash manures, not successful, G. H. Desai (176).
Propaganda, scope for increase, Kay 48,283.
Rab, facilities to agriculturists to obtain, from forests advocated, Dévadhar (229).

Railway freights, reduction needed, Nagpurkar (370). Sale through co-operative societies, Sir L. S. Mehta (142); Devadhar (229-30).

SULPHATE OF AMMONIA:

Experiments with, results and scope for increased use, Nagpurkar 50,508-21.

Fertilisers—contd.

SULPHATE OF AMMONIA-contd.

Propaganda by firms, results, Kembhavi (463).
no Propaganda needed in canal areas, Bhagwat 51,310.
Railway rates, reduction advocated, Nagpurkar 50,451-2.
Sale of, through co-operative societies, statistics, V. L. Mehta

(108-9)

9375

(170-9).

Supply by Bombay Provincial Bank working as agents on commission, V. L. Mehta (194), 48,660-6.

Use of, for sugarcane, G. H. Desai (155), (176); Nagpurkar (370), 50,512-7, 50,537-9; Bhagwat (438).

Finance:

Advances easy instalments and without interest, desirable, on

Advances on easy instalments and without interest, desirable, Kothawala (487).

Agricultural banking system necessary in connection with consolidation of holdings, G. H. Desai (171).

Agricultural banks, proposals, Naik 50,249; Kothawala (478), (478-9); Indian Merchants' Chamber, Bombay (512).

Banking facilities, need for, for settlers on new land and proposal, D. P. Desai (319).

further Capital needed by cultivators for improvements, Gordon 51 063-5

51,063-5. Central Farmers' Bank in each district at least, advocated, Kothawala (489).

CHEQUES:

Increased use cf, advocated, Devadhar (225).
Increasing adoption of, Mehta 48,670-1.
of Cotton crop, methods, Shirhatti (288-9).
Credit system for period ranging between five and ten years desirable, Devadhar (224).

Facilities for agriculturists, defectiveness of, Devadhar (224).
Facilities, need for increase, G. H. Desai (159); Kembhavi (462).
Financing of cultivators by Government body advocated, Kembhavi (464), 51,476.

(404), 51,476.

Financing of separate village communities under management of village panch, proposal, Peck (275).

Imperial Bank, revision of charter to enforce utilisation of reserves for development of agricultural industries and redemption of agricultural debts, advocated, D. P. Desai (314).

Inadequacy of credit facilities and proposals for increase, D. P. Desai (314), (315).

Insurance Companies, prohibition of investing money out of India advocated, D. P. Desai (314), 49,999-50,003.

Investment of capital in business, proposal for encouraging, Nagpurkar,

(368).

LAND MORTGAGE BANKS:
Advocated, G. H. Desai (194), (196); Kembhavi (464).
not Desirable, Gordon (416), 50,994-9.
Government assistance, proposals, V. L. Mehta (48,870-2; Devadhar (239).
Proposal, V. L. Mehta 48,873-4, 48,931-2. L. Mehta (105), (111),

Land mortgage credit system, proposals, V. L. Mehta (105), (107-8), 48,696-9; Sir L. S. Mehta (141).

Long term credit, Government should supply, Naik (338).

Peoples' Banks, proposal, Nagpurkar (368). Requirements, Nagpurkar (368). Rural agricultural banks advocated, Naik (338).

Short term, co-operative credit societies the best method, V. L. Mehta (104); Sir L. S. Mehta (140).

Special machinery for rural credit, need for, Mehta (104).

Taccavi LOANS:

Administration of, by revenue officer appointed on special duty in each district, proposal, Bhagwat (436).

INDEX.

Finance-contd.

Taccavi Loans—contd.

Advances from moneylenders preferred by cultivators to, and reasons, G. H. Desai (159-60).

Collection, rigidity of, G. H. Desai (160).

Collection, rigidity of, G. H. Desai (160).
Continuance only necessary in certain areas, V. L. Mehta (105).
Defects of system, G. H. Desai (159-60), 49,222; Devadhar (224),
Gordon (416).
Delay in obtaining, G. H. Desai (160).
Delay and corruption, Bhagwat (436).
Distribution quickly and by highly placed responsible officer advocated, Naik (338).
further Extension of system not desirable, Gordon (416), 51,010.
Instalments should be small and over long period, Kothawala (478).

no Limit to accumulation of, Gordon 51,147-8.

Reduction advocated, Kothawala (478), (487), 51,596-8.

Issue through Co-operative movement: Desirable and proposals for encouragement, Devadhar (225).

49,404.
with Direction of utilisation by Agricultural Department advocated, Nagpurkur (368).

Proposal approved, Gordon 51,013-5.

Issue through land mortgage bank or co-operative society, or responsible officer on the spot, advocated, G. H. Desai (160).

for Land improvement:

through Co-operative Societies, system, V. L. Mehta (105-106). 48,700-22.

Proposals for improvement of system, V. L. Mehta (106). no Losses in Baroda, G. H. Desai 49,133.

Lowest possible rate advocated, Naik (338).

less than 100 per cent. received by cultivator, complaints heard, Gordon 51,016-7. Payment through special banking facilities advocated, Kothawala

(478).Procedure too lengthy and troublesome and expediting advocated,

Rothawala (478). Proportion of sum received by cultivators, G. H. Desai (159-60).

Reduction, Government policy, D. P. Desai (314). Repayment, difficulties in securing, in Bijapur district, Gordon (416), 51,011-2.

Strict supervision and lower rate of interest advocated, Kembhavi (464). Writing off of, if recovery impossible, Gordon 51,145-6.

Flax, see under Crops.

Fodder, see under Animal Husbandry.

Forests:

ADMINISTRATION:

Interesting of village community in, advocated, Sir L. S. Mehta

Methods not in consonance with agriculturists' interests, Sir L. S. Mehta (142).

Menta (142).

Afforestation, need for, Nagpurkar (373).

Agriculturists' interests not properly co-ordinated with forest interests, Bhagwat (443).

Baroda, G. H. Desai 49,091.

Coupes, for first 10 years grass should be allowed to be cut only by villagers round about, Bhagwat (443).

Cultivable lands in dry tracts should no longer be kept under forest, Bhagwat (443). Bhagwat (443).

Forests-contd.

```
DEPARTMENT:
                should not be considered as Revenue-making department but as department to help agriculture, Nagpurkar (373).

Transfer to Minister of Agriculture proposed, Nagpurkar (368),
        no Deterioration from excessive grazing, Naik (340).
        FIREWOOD AND FODDER:
               Co-operative firewood societies or forest panchayats, proposed formation, Devadhar (233).

more Extensive cultivation of shrubs or small trees useful for wood
                or charcoal, advocated, Bhagwat (443).

Fuel, free supply advocated, Nagpurkar (373), 50,597.

Growing of Babul trees, proposal, and policy in Baroda, G. H. Desat
                     (188).
                 Increase, proposals for, Devadhar (233).
                Restrictions on grazing and use of firewood, enforcement:
Duty should be entrusted to local panchayats, Sir L. Mehta
                            (142).
                         too Rigid, Sir L. S. Mehta (142).
                Supply of grass, proposal, Bhagwat (440).
                 Utilisation of more waste lands for growing of, advocated, Naik
        Fodder laws, removal of vexatious restrictions advocated, Nagpurkar
            (372).
        Forest area should be left open as grazing ground as far as possible,
            Naik (340).
        GRAZING:
                Discouragement by forest laws, Nagpurkar (372). Facilitation of permits needed, Nagpurkar (372). Facilities in Baroda, G. H. Desai (188). Fees, not excessive, Nagpurkar (372), 50,598-603. Free, not advocated, Nagpurkar 50,619.
       Free, not advocated, Nagpurkar 50,619.

Pastures should be thrown open to public, Bhagwat (440-1).

Sheep grazing, facilitation advocated, Nagpurkar (370).

Green manure supply from, proposals for increasing, Devadhar (233).

Lac culture by forest tribes in Navsari district, G. H. Desai (186).

Officers, change of attitude needed, Nagpurkar 50,604-5.

Policy must be in favour of agriculturists, Nagpurkar, 50,597.

Rab, facilities to agriculturists to obtain, advocated, Devadhar (229).

Village, creation of, policy in Baroda, and proposal re, G. H. Desai (188).
FOTIADI, A., see CALVACORESSI, Stephen, and FOTIADI, A., Messrs. Ralli Brothers, 50,805-50,986.
Fruit growing:
       Oranges and lemons, Khandesh district, Ransing (388), 50,665-70. Personal experience, Walchand Hirachand 51,863. Proposal, Peck (276).
Ghi, see under Dairying Industry under Animal Husbandry.
Goat breeding, see under Animal Husbandry.
GOHEEN,, J. L., B.A., Principal, Sangli Industrial and Agricultural School, and in charge, Kolhapur Farm School: (495-502), 51,681-51,786.

AGRICULTURAL ENGINEERING SECTION, trained "Fieldmen" available for
           demonstration and propaganda work advocated, (500).
        AGRICULTURAL INDUSTRIES:
                Bee-keeping, possibilities of, (501).
Mr. Gandhi's movement, question as to possibilities, 51,775-6.
Intensive study advocated, (502).
                Obstacles in way of development, (501).
Poultry industry:
                       Appliances, remission of customs duty advocated, (500).
Need for research, (495), 51,727.
Possibilities of, (501).
Work of Sangli Agricultural and Industrial School re, (501).
```

GOHEEN, J. L .- contd.

AGRICULTURAL INDUSTRIES-contd.

Propaganda and demonstration work needed, (501).

Propaganda and demonstration work needed, (501).

Proposals, (501), 51,774-9.

Rope-making, proposal, and possibilities of, (501-2), 51,777-8.

Sheep raising, proposal, 51,777.

Time spent by cultivators on holdings and occupation during slack

seasons, (501). ANIMAL HUSBANDRY:

Dairy industry with goats, proposed development of, (500-1), 51,715-20.

Fodder, Silage:

Co-operative system, proposal, (498), (501), 51,764-9. Increased use of, need for, (501), 51,762-3. on Sangli Industrial and Agricultural School farm, (501). Goat breeding by witness, 51,715-9, 51,738-42.

Central institutions, importation and distribution of agricultural implements, appliances and machinery by, proposal, (500). Implement societies, extension advocated, (500). Sangli State, position of movement, 51,705-8.

CROPS:

Damage to, by animals, religious prejudices against destruction of animals decreasing, (499-500), 51,713-4.

Fodder, need for introduction of, (498).

Grain sorghum or juar, drought-resistant and quick-maturing varieties from California, successful introduction on farm of Sangli Industrial and Agricultural School, (498-9), 51,710-2.

Improvement of existing crops, scope for, and proposed lines of (498), 51,757-8.

Protection: Protection:

Active steps for prevention of infection and loss through pests

and disease advocated, (499-500).
Co-operation between districts necessary, (499).
from External infection, measures probably satisfactory, (499).

Seeds:
Distribution of good seeds, importance of, and proposal, (498).
Private industry, scope for development, (498).

CULTIVATION:

Dry farming:
proper Implements for, investigation advocated, 51,773.
Instruction of cultivators advocated, (499).

Introduction in scanty rainfall areas advocated, (498).

Personal experience, 51,770-3.

customary Rotations or mixtures fairly suitable, (499).

Thinner sowings with greater distances between rows, advocated, (499).

Tillage improvement, proposals, (499).

DEMONSTRATION AND PROPAGANDA:
District Agricultural Overseers, organisation into association on lines of Servants of India Society, proposal, (497), 51,709, 51,736-7,

Field demonstrations, means of increasing effectiveness of, (497). Home projects, proposal, (496), (497). Measures for influencing and improving practice of cultivators, (497).

DEPRESSED CLASSES:

Agricultural clubs for, proposal, (496), 51,703-4. Sangli, change in outlook, 51,696-8.

EDUCATION:

Adult, proposed means of popularisation, (497).

GOHEEN, J. L.—contd.

EDUCATION—contd.

Agricultural:

Attendances fairly good, but could be increased by propaganda, (496).

In High schools, four years' course, proposal, (502), 51,721-2. Incentives to study, (496). Kolhapur Farm School, particulars re, 51,687-90. Loni school, satisfactory but longer course desirable, 51,684-5, 51,700.

in Middle schools, extension advocated, (502). in Primary schools, extension advocated, (502). "Project" method, proposal, (496), 51,722.

Proposals, (502). Schools of Loni type, extension advocated, (496).

Students:

After-careers, 51,695, 51,732.

After-careers, 51,695, 51,732.
Source of, (496).
Supply of teachers and institutions insufficient, (495-6).
Teachers in rural areas should be drawn from agricultural classes, (496).
Agricultural bias course in vernacular middle schools, (496).
Nature study, value of, (496).
Sangli Industrial and Agricultural school, particulars re, 51,686-7, 51,691-8, 51,699, 51,729-35.
School farms, value of (496).

School farms, value of, (496). School plots, value of, (496).

FERTILISERS:

Artificial, scope for increased use of, (497).
Cowdung, use as fuel, means of preventing, (495), (498).
Farmyard, storage and use of, investigation and instruction of cultivators advocated, (497-8).
Natural, scope for increased use of, (497).

Adoption of new and improved, means of hastening, (500).

Co-operative implement societies, extension advocated, (500).

Importation and distribution by Central co-operative institutions,

proposals, (500).

Imported:

Customs duty on, remission advocated, (500).

Prices considered too high by cultivators, (500).

Iron plough, increasing use of, (499), (500).

Manufacture in India by Messfs. Kirloskar Bros., willingness to cooperate as regards desires of cultivators, and instance of, 51,760. New and improved, proposals for, (499), (500).

IRRIGATION:

Conservation of moisture:

Instruction of cultivators in areas of scanty rainfall in need for and methods of, advocated, (499). by Tals, etc., an economic proposition and scientific examina-

tion by engineer desirable, 51,780-6. Excessive use of water, instruction of cultivators advocated to pre-

vent, (499).

MIDDLE CLASS YOUTHS, Agricultural clubs for, proposal, (496), 51,703-4.

Research, proposed lines of, (495), 51,723-7.

Welfare of Rural Population, improvement of health conditions, education the most effective means, (502).

GORDON, R. G., I.C.S.: (415-419), 50,987-51,187.

AGRICULTURAL DEPARTMENT:

District reports should be issued by, (416), 51,154, 51,161. closer Touch with Revenue Department advocated, (416).

GORDON, R. G .- contd.

AGRICULTURAL INDESTEDNESS:

Causes of, (416).

Credit, sources of, (416).

Mortgage and cale, restriction of right under Bombay system, but general application undesirable, (416).

Repayment, reasons preventing, (416).

AGRICULTURAL INDUSTRIES, desirable, (417).

AGRICULTURAL LABOUR:

Annual migration from Ratnagiri and Kaira districts to Broach and other districts, (417), 51,079-81, 51,092.

Shortage in cultivating season and surplus in slack season, Bijapur district, (417), 51,003-5, 51,092-3.

Animal Husbandry: Castration, mechanical, popular in Bijapur and propaganda needed in other parts, (416), 51,086-9.

Decrease in number of cattle, 51,099.

Enclosed pastures, effect on quality of cattle, 51,035-6. Quality of cattle in Gujurat, 51,034-6.

CO-OPERATION

Bijapur district, not very successful and reasons, (417).
Collectors should take interest in, 51,131.
Joint improvement schemes, compulsion on minority to join, advocated, (417).

Movement very useful if good men take interest in, 51,056.

Voluntary workers preferred to official, 51,057-62.

CROPS

Cotton:

Introduction of improved variety in Bijapur, (415).
Waste land, giving out of, for cotton cultivation in some talukas, 51,082-4.
Groundnut, introduction into Kaira, (415).

CULTIVATION:

Bullocks:

Area that can be cultivated by pair of, 51,098-106, 51,108-9. Cost of keeping, increase, 51,135.
Standard, decline in, in Gujarat, 51,018-33.
Terracing, scope for, in Bijapur, 51,094-5.

Demonstration and Propaganda:
on Cultivators' fields:
Advocated, (415-6), 51,144.
Cultivators should be guaranteed against loss, (416), 51,144.

Demonstration farms: Alibag, failure of, (415). Nadiad, given up, (415).

EDUCATION :

Agricultural bias schools, (418).

general Attitude re, a desire for training for something other than agriculture, (417-8), 51,149-50.

Excise Revenue, comparison with land revenue, 51,168-9.

FINANCE:

ANCE:
further Capital needed by cultivators for improvements, 51,063-5.
Land Bank not desirable, (416), 50,994-9.
Long-term credit, provision through co-operative societies advocated, (416), 50,994-9.
Taccavi loans:

Defects of system in Bijapur district, (416).
further Extension of system not desirable, (416), 51,010

further Extension of system not desirable, (416), 51,010. Interest, no limit to accumulation of, 51,147-8.

GORDON, R. G .- contd.

FINANCE-contd.

Taccavi loans—contd.

less than 100 per cent. received by cultivator, complaints heard, 51,016-7.

Repayment, d 51,011-2. difficulties in securing, in Bijapur district, (416),

Issue through co-operative credit societies, proposal approved,

Writing off of, if recovery impossible, 51,145-6.

Consolidation, attempt at, on Punjab lines, proposed, (417).

Fragmentation:

Difficulties of question, (416-7), 51,000. Education as to evils of, in rural schools proposed, (417).

Bunding of streams not feasible in Bijapur, 51,178-9.

Kaira district, uselessness of rivers for, 51,096-7.
Oil-engines introduced for working pumps, in Kaira, (415).
Sub-soil water tax, Gujarat, and sinking of wells not discouraged by, 51,118-21.

Tanks and wells made by private people, no taxation of, 51,075-8. Wells:

Kaira district, lowering of water level and question of cause. 51,066-74. Sinking of, desirable in Bijapur if water available, 51,176.

Narvadari tenure, 51,038-43, 51,139.

Rack-renting in Kaira and enquiries should be made with view to legislation, 51,037, 51,137-8.

Rents:

Comparison with assessment, Kaira district, 51,050.

Percentage of produce, Kolaba district, 51,046-9.

Talukdari system, 51,140-3.

Record of rights, village officers should hold offices in villages and make records available to people, 51,151-3.

LAND REVENUE:

Assessment:

Percentage of produce, Kolaba district, 51,044-5.

Revision, factors taken into consideration, 51,114-7. Collectors, responsibility for general economic welfare of the people, position re, formerly and at present, and proposals, 50,988-93, 51,110-3, 51,132-4, 51,156-66.

Department, closer touch with Agricultural and Veterinary Departments advocated, (416).

Soils, bunding, need for, in Bijapur district and co-operative system the best agency, 51,064-5, 51,095, 51,170-5.

STATISTICS:

Cultivation and crops, variation in accuracy, (418) Decennial census, more detail with regard to caste by districts, proposal, (418).

Estimates of yield, difficulties and proposals, (418). Land tenure, improvement advocated, (418-9). Livestock and implements, satisfactory, (418).

VETERINARY DEPARTMENT:

District reports should be issued by, (416). closer Touch with Revenue Department advocated, (416).

WELFARE OF RURAL POPULATION:

Economic surveys:

Advocated, 51,123-6.

GORDON, R. G.-contd.

WELFARE OF RUBAL POPULATION—contd.

Economic Surveys-contd.

Essential, (418), 51,006-9. by Government officials in conjunction with non-officials advo-

cated, 51,127.

Intensively with regard to group of villages and extensively with regard to larger areas proposed, (418), 51,128. Expenditure on marriages, 51,183-6. Standard of living, probable rise in, 51,051, 51,122.

Grazing, see under Animal Husbandry and under Forests.

Groundnuts, see under Crops.

Gur, see under Sugar industry.

GURJAR, N. W., Secretary, Messrs. Kirloskar Brothers Ltd.: 50,283-50,438.

BOMBAY CENTRAL CO-OPERATIVE BANK, sale of implements through, 50,438.

IMPLEMENTS:

more Foreign ploughs sold in Punjab than Indian-made ploughs, 50,324.

Manufacture in India:

Designs, difficulty of obtaining, and investigation by Agricultural Departments advocated, 50,297-8. Government guarantee to purchase minimum number of imple-

ments every year, proposal, 50,325-8. by Messrs. Kirloskar Brothers:

Agricultural chemist employed, 50,435.

Assistance from taluka development associations and extension advocated, 50,362-3.

Attitude of agricultural engineers, 50,337-42.

Employment of men who have received training in foreign countries, 50,426-9.

Magazines published by, 50,364-70. Plough, quality of, 50,339-42. Propaganda by, 50,350-4. Proportion of total, 50,302. Relations with Agricultural Depart

Relations with Agricultural Departments, 50,356-60, 50,396-401.

Sales system, 50,306-16, 50,371-3.
Sales yariations in, 50,304-5, 50,402-9.
Sending out of men with technical knowledge to study requirements, 50,430-4.

Travelling agents, 50,410-2.
Railway concession rate for long distances, requested but refused, 50,343-9, 50,386-8.

tused, 50,343-9, 50,386-8.

by Satara Agricultural Association, 50,419-23.

Steel imported for, special remission of duty advocated and proposed method, 50,288-96.

Steel manufactured in India too expensive, 50,295.

Travelling salesmen, concession rates on railways and assistance by Agriculture Departments advocated, 50,318-9.

Popularisation, proposed means, 50,299-300, 50,303, 50,317, 50-374-9.

Purchase of, by Stores Purchase Department of the Government of India, proposals, 50,332-6.

Railway classification complaint re 50,988-7

Railway classification, complaint re, 50,286-7. Railway transport facilities, need of improvement and proposals, 50,329-31, 50,361.

Holdings:

Area of land required to maintain family of three, Sir L. S. Mehta 48,988-94; G. H. Desai 49,283-5.

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Holdings-contd.
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CONSOLIDATION:
      Advantages to be derived, Burt (49), (50); G. H. Desai (170-1).
      Agricultural banking system necessary in conjunction with, G. H.
         Desai (171).
      Appointment of experienced revenue officer in each province to work
          under Registrar of Co-operative Societies or Director of Agricul-
      Attempt at, on Punjab lines, proposed, Gordon (417).

Baroda, work re, G. H. Desai (162), (163-4), (169-70), (191), (192).
     Bombay draft legislation generally accepted, Sir L. S. Mehta (141). Compulsion on minority advocated, Devadhar (227). through Co-operative societies:
            Advocated, Burt (49); Peck (276).
in Baroda, G. H. Desai (191), 49,059-60.
proposed Encouragement by remission of land revenue for limited period, G. H. Desai (191), 49,058-61.
Tried, but not found suitable, in Bombay, G. H. Desai 49,118-21.
      Disputes arising from, must be kept out of Courts, Devadhar (227).
      Employment of persons displaced, question of, Walchard Hirachard
      Essential for improvement of agriculture, G. H. Desai (163), 49,035. Government's duty in regard to, G. H. Desai (171-2). Hastening of work, need for, G. H. Desai (196). Leaders of the people, duty of, G. H. Desai (172).
      Legislation:
             Necessary, Sir L. S. Mehta 48,981-2.
             will become Necessary but should follow successful demonstra-
                 tions, Burt (49).
             Proposal, Bhagwat (437), 51,304-6.
      proposed Means of, G. H. Desai (166-72), 49,087, 49,246-60; Kotha-
         wala (479).
      Minor disputes should be settled out of Court, Peck (275).
      by Natural processes, taking place and will continue if left alone, Nagpurkar (369).

Needed for introduction of larger or better implements, G. H.
         Desai (180).
      Neglect of people to carry out, reasons for, G. H. Desai (171). • Obstacles in way of, Devadhar (227); Peck (275); Naik (338); Kothawala (479), (487).
      Occupancy tenants and scattered holdings, difficulty of, Burt (49).
      not Possible until sufficient industries started or doors of colonies opened to Indians, D. P. Desai (315-6).

Pre-emption, right of, proposal, G. H. Desai (167), 49,246.
      Punjab system:
     generally Agreed with, V. L. Mehta 48,912.

Approved, Sir L. S. Mehta (141).

Re-arrangement on principle of economic unit and on basis of original ownership, possibilities of, and advantages of second method, G. H. Desai (168), 49,252-60.

Requirements for excess Parts (168).
      Requirements for success, Burt (50).
Restriction on sale of right of occupancy, proposal, G. H. Desai
         (167).
      Restripping:
            Cost of, G. H. Desai (170).
a Slow process, G. H. Desai (170).
Voluntary, advocated, G. H. Desai (169).
      mcreased Revenue demand, fear of, D. P. Desai (315).
      Voluntary :
            Advocated, D. P. Desai 50,057-8.

Difficulties in way of, and proposed means of encouraging,
G. H. Desai (166-7), 49,247.
```

Holdings-contd.

CONSOLIDATION-contd.

Voluntary-contd.

Propaganda advocated, with special assistance or concessions from Government, etc., Devadhar (227).

CO-OPERATIVE CULTIVATION:

Kosad, experiment, Naik 50,198-9.
Proposal, Devadhar (227); Naik (338), 50,198-203.
Economic holding for husband, wife and two children, Naik 50,249.

FRAGMENTATION

Causes of, G. H. Desai (162), 49,087; D. P. Desai (315-6); Indian Merchants' Chamber, Bombay (511).

Difficulty of question, Gordon (416-7), 51,000.

Education as to evils of, in rural schools proposed, Gordon (417).

Evils of, Burt (49); G. H. Desai (162-3), (193), (194); Devadhar (227); Kothawala (479); Indian Merchants' Chamber, Bombay (511) (511).

Excessive, should be checked, but sub-division to certain extent must be allowed, Naik (338). below Fixed limit, prevention of:

in Baroda, measures taken, G. H. Desai (162), (163), (164), (166), 49,229-40, 49,245.

Proposal, G. H. Desai (165-6); Bhagwat (437), 51,306; Kothawala (479), (487), 51,619; Indian Merchants' Chamber, Bombay (511-2); Walchand Hirachand 51,936-7.

Further, proposed measures for preventing, G. H. Desai (164-6), 49.087.

Hindu and Mahommedan laws a cause of, and proposed abrogation, Kembhavi (464), 51,479-81.

Mahommedan laws of inheritance would be welcomed, Walchand Hirachand 51,966-8, J. K. Mehta 52,102.

possible Means of minimising loss from, Devadhar (227); D. P. Desai (315-6).

proposed Measures re, Kothawala (487).

Sub-division, need for raising standard for, G. H. Desai (164-5).

Legislation Dealing with Minors, Widows, etc.: not Necessary, G. H. Desai (172), 49,241-4. Objections to, Kembhavi (465).

Standard of cultivation, legal insistence on, proposal, Peck (275). Village disputes, village panchayat should be empowered to deal with, Naik (338).

Implements:

Advantages of, under certain conditions, G. H. Desai (178-9).

Agricultural development societies, proposal for, in every village,

Kirloskar Brothers (354).

Agricultural Engineers, Department of, at every District place, proposal, Kirloskar Brothers (353).

Agricultural machinery free of duty, G. H. Desai (189-90).

Co-operative use of agricultural machinery, societies for, desirable, Peck (276).

DISTRIBUTION:

by Bombay Provincial Bank, working as agents on commission, V. L. Mehta (104), 48,660-6.

Co-operative implement societies, extension advocated, Goheen (500). through Co-operative societies and proposal re, V. L. Mehta (109), 48,826-31.

Co-operative societies for, on hire or hire-purchase system, success of, and extension advocated, Devadhar (230).

Implements-contd.

DISTRIBUTION--contd.

Hire-purchase system, desirability dependent on value of implements, Devadhar 49,597-8.

Hiring out of, from model farms, proposal, Peck (276).
Requirements, Kothawala (481-2).
for Dry farming, investigation advocated, Goheen 51,773.
more Foreign ploughs sold in the Punjab than Indian-made ploughs, Kirloskar Brothers (355); Gurjar 50,324.

IMPORTED:

Customs duty on, remission advocated, Goheen (500).

Prices considered too high by cultivators, Goheen (500).

Importation and distribution by central co-operative institutions, proposals, Goheen (500).

IMPROVED:

Examination of soil needed in connection with, Kothawala 51,674. Popularisation, measures adopted in Baroda, G. H. Desai (180-1). Seeder, Goheen (500).
Use of, in Baroda as result of agricultural education, G. H. Desai

49,176-7. Use of, by witness, Kothawala 51,671-6.

IMPROVEMENT:

Advocated, Bhagwat (439). Experimental work, need for, Burt (44).

of Indigenous implements:

Investigation, need for, G. H. Desai (180). Preferable to introduction of new, D. P. Desai (317), 49,944-5. Scope for, Naik (339).

INDIGENOUS:

Substitution of new implements not desirable, D. P. Desai 50,026-9. most Suitable on the whole, modern machinery only desirable in case of land development schemes, Nagpurkar (371), 50,486-93.

Introduction of New and Improved:

Co-operative movement, value of, Sir L. S. Mehta (142). through Dhulia Taluka Agricultural Association, Ransing (388). Economic factor, Sir L. S. Mehta (142). Improvement of cattle and consolidation of holdings needed for,

G. H. Desai (180).

proposed Means of hastening, V. L. Mehta (109); Devadhar (230);

Naik (339); Kirloskar Brothers (354), (355); Gurjar 50,299-300,
50,303, 50,317, 50,374-9; Bhagwat (439); Kothawala (481); Goheen

Model farms would help by practical demonstrations, *Peck* (276). Obstacles in way of, *D. P. Desai* 50,028. Preferable to improvement of existing, *Kothawala* (481).

Proposals for:

Manure spreader, simple type, Goheen (500). small Reaping machinery, Bhagwat (439).

Ridger, Bhagwat 51,311.
Seed drill, Bhagwat (439), 51,311-3.
Simple but practical clod crushers and soil compactors, Goheen (499), (500). Threshing and winnowing machine, Goheen (500).

Steps necessary for, G. H. Desai (180).

IRON PLOUGH:

Advocated, Kothawala (481). Increasing use of, Goheen (499), (500). Introduction, Bhagwat (434).

implements-contd.

IRON PLOUGH -contd.

Introduction, steps taken by witness to induce, Kothawala (477), 51,590-5, 51,609-15. not very Successful, Naik (339).

LABOUR-SAVING IMPLEMENTS:

Desirable but must be suited to agricultural conditions, Bhagwat (439).

Need for, G. H. Desai (180), (188).

MANUPACTURE IN INDIA:

Designs:

Difficulty in obtaining, and investigation by Agricultural Departments advocated, *Gurjar* 50,297-8, 50,355-8, 50,413-8.

Difficulty re, and proposal, Kirloskar Brothers (353). Duty on steel an obstacle, Kirloskar Brothers (352).

Facilities for railway transport, need for, and proposals, Devadhar (230); Kirloskar Brothers (352-3).

Government guarantee to purchase minimum number of implements every year, proposal, Kirloskar Brothers (353-4); Gurjar 50,325-8.

Import duty on iron, reduction of, would encourage. Devadhar (230)

by Kirloskar Brothers:

Agricultural chemist employed, Gurjar 50,435.
Assistance from taluka development association and extension advocated, Gurjar 50,362-3.

Attitude of agricultural engineers, Gurjar 50,337-42. Employment of men who have received training in foreign countries, Gurjar 50,426-9.

History of, and difficulties experienced, (352-5).

Magazines published by, Kirloskar Brothers (355); Gurjar

50,364-70.

Plough, quality of, Gurjar 50,339-42.

Propaganda by, Gurjar 50,350-4. Proportion of total, Gurjar 50,302.

Relations with Agricultural Department, Gurjar 50,356-60 50,396-401.

Sale system, Gurjar 50,306-16, 50,438, 50,371-3.
Sales, variations in, Gurjar 50,304-5, 50,402-9.
Sending out of men with technical knowledge to study requirements, Gurjar 50,430-4.

Travelling agents, Gurjar 50,410-2.

Willingness to co-operate as regards desires of cultivators, Bhagwat 51,314-21; Goheen 51,760.

Obstacles in way of, and proposals for encouraging, Kirloskar Brothers (352-6).

Packing wood, etc., should be supplied at comparatively cheaper rates, Kirloskar Brothers (353).

Railway concession rate for long distances, requested but refused, Guriar 50,343-9, 50,386-8.

Raw material imported should be exempted from duty, Kirloskar Brothers (352).

by Satara Agriculture Association, Gurjar 50,419-23.

Steel imported for, special remission of duty advocated, and proposed method, Kirloskar Brothers (352); Gurjar 50,288-96, 50,382-95.

Steel manufactured in India too expensive, Gurjar 50,295.

Travelling salesmen, concession rates on railways and assistance by Agricultural Departments advocated, Kirloskar Brothers (355); Gurjar 50,318-9.

Implements-contd.

Manufacturers:

Investigation by, into local conditions in Baroda, G. H. Desai 49,050-1.

Studying of local conditions by, need for, G. H. Desai (180). Ploughs and tools, scope for increased propaganda, Kay 48,283, 48,323. Purchase of, by Stores Purchase Department of the Government of

India, proposal, Kirloskar Brothers (356); Gurjar 50,332-6. allway classification, complaint re, Kirloskar Brothers (355); Gurjar Railway 50,286-7.

Railway rates, reduction advocated, Kirloskar Brothers (354)), (355); Kothawala (482).

Railway transport facilities, need of improvement and proposals, Kirloskar Brothers (354-5); Gurjar 50,329-31, 50,361.

Repair facilities and provision for supply of spare parts advocated,

Devadhar (230).

Requirements of various kinds of soils in Gujarat, no investigation made by manufacturers, D. P. Desai 50,030-1.
Sale of, proposed means, Kirloskar Brothers (354).

Tools and implements in use in Gujarat, including Baroda, G. H. Desai (179-80).

Tractors:

Desirable for particular purposes, and hiring out of, to cultivators by companies, proposed, D. P. Desai 50,095.

Government asked for, but nothing done, Khandesh district, Ransing 50,798-9. Use of, Walchard Hirachard 51,848.

Improvements:

would be Encouraged by long period settlements, G. H. Desai (194).

EXEMPTION FROM LAND REVENUE:

Baroda, G. H. Desai 49,110, 49,194-6. in Theory but not always in practice, G. H. Desai (194). Factors discouraging landowners from carrying out, G. H. Desai (194); Devadhar (240); Naik (340); Nagpurkar (374), 50,570; Bhagwat (446-7); Kothawala (485), (489).

Nature of, required, Nagpurkar 50,571.

Indian Central Cotton Committee:

Appointment, 1921, (2). Central economic section may become necessary, Burt 48,468. Composition, (3).

Election suggested instead of nomination, Naik 50,136-7.

Contact with Ministers of provinces, extent of, Kay 48,336-8; Burt 48,338.

Co-operative marketing societies would be assisted by, Burt 48,539-41.

Cotton breeding work, Burt 48,487-94.
Distinction of functions from those of Agricultural Departments, Kay 48,313-4, 48,327.

District Committees would not be objected to, if desired by provincial

District Committees would not be objected to, if desired by provincial committees, Burt 48,529-32. Evidence on behalf of, see Burt, B. C., (42-59), 48,224-48,548, (92-94), and Kay, Sir Joseph, 48,224-48,350. Expenditure on central research institutes, studentships and special investigations, Burt (59). Finance, future position re, (11-12). Financial assistance of Provinces, possibility of, Kay 48,329-30. Financial position of, Burt 48,331-2, 48,339, 48,343; Kay 48,332, 48,343. Financing of, by cotton cess, (2-3); Burt 48,343, 48,434-5. Good work done by, Naik 50,132-4; Fotiadi 50,846.

Indian Central Cotton Committee-contd.

GRANTS TO PROVINCIAL GOVERNMENTS:

Details, Burt (47), (58-59), 48,270-1, 48,499-500; Mann (48,576).

no Difficulty known of owing to grants being excluded funds, Burt 48,475-6.

History and work of, memorandum on, (1-41). Income and expenditure, (3). Indore institute, Burt (48), 48,354-6, 48,521-5. Meetings with actual growers, Burt 48,299-301.

MEMBERS:

Honorary and voluntary, Burt 48,340. Travelling allowance paid to up-country members, Kay 48,341. Tribute to, Kay 48,341.

Memorandum, (1-41).

Money spent on putting up plant at Matunga, objection to, Indian Merchants' Chamber, Bombay (510); Mehta 51,926-35, 52,009.

Objects of, Kay 48,232.

Physiological research schemes, Burt 48,533-8.

Policy, Burt (43); Kay 48,347.

Position of, and organisation of work, (4). better Price secured to producer as result of work of, Burt 48,272; Kay 48,273.

PROCEEDINGS, INTERPRETATION OF:

Necessity, question of, Burt 48,312. Possible, but has not been necessary, Kay 48,311-2.

Provincial Cotton Committees: (4-5).

Meetings, attendance of witness, Burt 48,302.

Proceedings, discussed by main Committee, Kay 48,302.

Publications of, (6) (35-6); Kay 48,317; Burt 48,542-3.

Reconnaissance before setting up of, Burt (46), 48,371.

Relations with Imperial and Provincial Departments, Kay 48,229, 48,232; Burt 48,230-1.

Representation of growers on, Kay 48,234-5; Burt 48,236-46; Naik

50,138-45, 50,156-61.
of Actual growers, would be welcomed, but difficulty of obtaining, Kay 48,290.

Nomination by Local Governments, Kay 48,309-10. Strengthening of, difficulty, Burt 48,243.

Representation of Indian Merchants' Chamber, Bombay, on, J. K. Mehta 52,145-6.

Research scholarships, Kay 48,282, 48,328.
Research workers, type of, Kay 48,281-2.
Research splication to research in other branches of agriculture, opposition anticipated, Burt 48,481-2.

Scope of work undertaken by, Burt 48,331, 48,333; Kay 48,333.

Technical note on various provincial research schemes financed by, (38-41).

Technological laboratory, (7-8); Kay 48,228.
Trade attitude re work of, Kay 48,248, 48,344.
Trade representation on, Kay 48,344.
Closer Touch with Co-operative Departments desirable, Burt 48,449-54.
Useful work done by, Indian Merchants' Chamber, Bombay (510).
Work of, (3-4); Burt (22).
Workers, short-term agreement system, Burt 48,469-74.

Indian Cotton Committee, work and recommendations, Indian Central Committee (1-2).

lxxiv

62471

Indian Merchants' Chamber, Bombay:

Evidence on behalf of, see Walchand Hirachand, and Mehta, J. K., (510-513), 51,787-52,146.

Representation on Bombay Legislative Council and in Legislative Assembly, Walchand Hirachand 52,077.

Representation on Central Cotton Committee, J. K. Mehta 52,145-6.

Industries, need for increase and co-ordination with agricultural industry, and proposal, Bhagwat (433-4), (442).

International Institute of Agriculture at Rome:

Closer relations with, need for, and proposals for, Burt (57-58). permanent Indian delegate, proposal for, and estimated cost, Burt (58), 48,436; Sir L. S. Mehta 48,930.

World census of agricultural production to be made in 1931, desirable of Latin and the state of the state o

ability of Indian collaboration, Burt (56-57).

Irrigation:

Administration by Agricultural Department advocated, Bhagwat (438), 51,323-4; Kothawala (488); Indian Merchants' Chamber, Bombay (512); Walchand Hirachand 51,811-6, 52,114-7, 52,136-9.

in Areas liable to famines and scarcities, proposed financial assistance, V. L. Mehta (108), 48,811-4.

Bijapur district, need for, Kembhavi (465).

Black soil not suitable for, G. H. Desai 49,115. Bunding of streams not feasible in Bijapur, Gordon 51,178-9.

small Bunds in river beds and rivulets, increase advocated, Bhagwat (437).

CANALS:

Deccan, nature of crops grown and scope for extension of number, Bhagwat 51,194-206.

Distribution of water:

Baroda system, G. H. Desai (174). by Cultivators on co-operative basis, offered by Department but not accepted and reason, Bhagwat 51,389-92.

Defects of system, Bhagwat (438). by Measurement advocated, Bhagwat (438), 51,241-5. Regulation by Committee of local leaders, proposal, G. H.

 $ar{D}$ esai (174). Running of distributaries to fixed programmes, desirability of, Burt (50-1).

Serious study of question, need for, Burt (50-51). Unsatisfactory and suggestion, Kothawala (488).

Drainage schemes must accompany canal schemes, Bhagwat (438). Increase of capacity, should be considered, Bhagwat (437).

Perennial, must be accompanied by drainage system, question of economics of, and need for investigation, Nagpurkar (369).

Outlet wells, insistence on construction of, by cultivators, hardship of, Walchand Hirachand 51,845-7.

Productive, should be regarded more as instruments for improving standard of production and less exclusively as revenue-producing

concerns, Burt (51).

Rates, fixing of, should lie with Agricultural Department, Walchand Hirachand 51,815-6.

Roads, opening of, to public advocated and small toll would not be objected to, Walchand Hirachand 51,825-9, 51,891-8, 51,995-2000, 52,078-9.

Seasonal canals, ponds, tanks, embankments, bunds and wells better than perennial canals, Nagpurkar (369).

Wastage of water by absorption and evaporation, proposed means of preventing, Kothawala (480).

CONSERVATION OF MOISTURE:

Instruction of cultivators in areas of scanty rainfant in need for, and methods of, advocated, Goheen (499).

Importance of, Ransing 50,779.

Irrigation—contd.

CONSERVATION OF MOISTURE—contd. Investigation needed, Nagpurkar (369), 50,524-31.

by Tals, etc.:
an Economic proposition and scientific examination by engineer desirable, Goheen 51,780-6. Organic manures could be used after making of, Nagpurkar 50,527-31.

CO-OPERATIVE SOCIETIES FOR:

Assistance by loans, etc., proposal, Devadhar (228). Proposal, Sir L. S. Mehta (141).

DEPARTMENT:

Assurance to cultivators of certain amount of water needed, if land developed, Walchard Hirachard 51,859-62, 51,864-90.
Rules, rigidity of, and more elasticity advocated, Bhagwat 51,216-22.

District Local Boards, power to, to undertake irrigation schemes, proposal, Devadhar (228).

Districts in which extension of facilities needed, Devadhar (227), (228-9). Diversion of water to industrial interests, Walchard Hirachard 51,959-62, 51,866-90.

Excessive use of water, instruction of cultivators advocated to prevent, Goheen (499).
Extension advocated, and proposed means, Bhagwat (437-8).

Field embankments for conservation of rain water, possibilities in Sholapur, V. L. Mehta (108).

Field ponds, filling in of, by siltage and keeping up of, out of revenue collected as himayat proposed, Kothawala (488).

for Fodder, facilities needed, D. P. Desai (318), 50,050.

GUJARAT:

see also under Wells below.

Conditions in, and need for schemes, G. H. Desai (172-3); D. P. Desai (316).

Expenditure on, inadequacy or, war, Sind, Naik (339), 50,230-2, 50,244.

Need for protection works, D. P. Desai 49,989.

1-rigation Commission, 1901-3, recommendations of, and non-

Aced for protection works, B. F. Desai 43,963.

Indian Irrigation Commission, 1901-3, recommendations of, and non-carrying out, G. H. Desai (172-3).

Irrigators' Associations, Bhagwat 51,347-54.

Kaira district, uselessness of rivers for, Gordon 51,096-7.

Land would be acquired for cultivators, if necessary, for water channels, G. H. Desai 49,192-3.

Lift with power-numning machinery advocated where deep basins.

with power-pumping machinery, advocated where deep basins exist, Nagpurkar (369). Major schemes, annual loss on, Devadhar (228).

MINOR SCHEMES:

Development, comprehensive policy should be carried out, Sir L. S. Mehta (141), 49,015.

Obstacles to development of, financial and technical, V. L. Mehta (108), 48,913.

Staff, proposal re, Sir L. S. Mehta (141).

North Gujarat, need for perennial scheme and proposal, Kothawala (479-80), (480), (481), (483-4), (485), (487), 51,599-603.

Oil engines and pumps, need for services of engineer to advise cultivators, G. H. Desai (180).

vators, G. H. Desar (180).

Oil-engines introduced for working pumps in Kaira, Gordon (415).

Protective schemes, need for extension and change in Government policy as regards expenditure advocated, Devadhar (228-9), 49,328-31.

Pumping, personal experience, Kothawala 51,579-85.

Rain water money should not be charged when crops fail, Kothawala 51,679-80.

Research, need for experimental work, Burt 48,357-9.

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Irrigation—contd.
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FROM RIVERS:

in Baroda, by use of bunds, G. H. Desai (173).
Difficulties in, G. H. Desai (172).
in Gujarat, need for schemes, G. H. Desai (172-3), 49,039, 49,124-7.
Sabarmati irrigation scheme, particulars of, and carrying out of, advocated, Kothawala (479-80), (480), (483-4), (485), (487), 51,599-603.
Scarcity of water in certain districts, and wells advocated, Peck (275).
Sind, opposition to, D. P. Desai 49,990-2.
South Daskroi taluka, insufficiency and proposed measures, Kothawala (486), (487), (488), 51,680.

SUB-SOIL WATER:

no Charge for if water below 40 ft., G. H. Desai 49,122.

Tax, Gujarat:

and Sinking of wells not discouraged by, Gordon 51,118-21. Wells decreased owing to, Naik 50,233-4.

SUKKUR BARRAGE:

Alkali formation, danger of, but possibility of meeting, and need for increased funds, Mann 48,620-2.

Auctioning of land, speculators would be encouraged, Mann 48,577-8.

Conditions on Right and Left Bank, differences, Mann 48,555-7, 48,604-10.

Colonisation of areas under, proposal for, Devadhar (233), 49,408-12, 49,532-5.

Development work under, budget, Mann 48,596-600. Distribution of land, method not yet settled, Mann 48,573-4,

48,617-9.

Encouragement of small holders hoped for, Mann 48,570-2.

Land to be squared on Punjab system, Mann 48,579.

Larkana farm, Mann 48,583-6.
Progress and policy of Government re, Mann 48,549-51, 48,580-2,

48,588-622. Sakrand station:

future Demonstration staff, Mann 48,564-6, 48,614-6. Research staff, Mann 48,558-63, 48,575-6.

Scientific staff, possibility of obtaining, Mann 48,590-3. Sub-stations, Mann 48,552-5.

Tube wells necessary in certain parts, Mann 48,585-7.

TANKS:

Baroda, maintenance, G. H. Desai 49,190. Chain of, scheme for, in Deccan districts, Devadhar (227-8), 49,331. Value of, Devadhar (227-8).

TANKS AND PONDS:

Districts where scope for, Mehta (108). Drying up of, Kothawala (480), (486), (488).

Tanks and wells made by private people, no taxation of, Gordon 51,075-8.

Technical advice, proposal, V. L. Mehta (108).

Telegraphs and telephones, opening of, to public advocated, Walchand Hirachand 51,825, 51,830. Water diviners, Ransing 50,801-4.

Wastage in village channels and possible palliative remedy, Burt (50).

Waterfinder, appointment by Government approved, Nagpurkar 50,572.

WATER FINDING:

Investigation of underground streams advocated, Nagpurkar (369). by Major Pogson, results in Baroda, G. H. Desai 49,075.

WATER LEVEL

Baroda, G. H. Desai 49,122-3. Gujarat, lowering of, D. P. Desai (318).

Irrigation-contd.

Water rates, crop basis and area basis in Baroda, G. H. Desai 49.073-4. Water requirements of crops, need for investigation, Burt (44-45).

Assistance of cultivators by State, Baroda, G. H. Desai 49,191. Baroda, system, &c., G. H. Desai (173-4). Boring of, proposed assistance to cultivators, Kothawala (488). Decrease in water in, Sir L. S. Mehta 48,951. Expert advice needed by cultivators, Devadhar (228).

Extension:

Districts where scope for, V. L. Mehta (108). Obstacles in way of, G. H. Desai (174).

in Gujarat':

Decrease owing to sub-soil water tax, Naik 50,233-4.
not Agreed with, Gordon 51,118-21.
Scope for, G. H. Desai 49,116-7.
Kaira district, lowering of water level and question of cause,

Gordon 51.066-74.

Bersian wheel, G. H. Desai (173).
Sinking of, desirable in Bijapur if water available, Gordon 51,176.
Size and cost of, G. H. Desai (1734).

Useful but dry up in dry periods, Kothawala (480), (486), (488).

Irrigators' Central Committee, Deccan Canals:
Constitution and objects of, &c., Bhagwat (431), 51,188-93, 51,347-55.
Evidence on behalf of, see Bhagwat, K. B. (431-448), 51,188-51,409.

Juar, see under Crops.

Jute, see under Crops.

KARMARKAR, Mr., Secretary, Gadag Co-operative Cotton Sale Society, 49,697-49,926, (311).

Ginning factories, licensing of owners advocated, (311), 49,926. Marketing:

Brokers should be abolished, 49,923.

Co-operative sale societies:
Gadag, method of working, and boycott, 49,884-90, 49,901-2, 49,907-21, 49,924-5.

Improvement of system, suggestions for, (311). Improvement, proposals, 49,923-6. Storage, arrangements, 49,901-2.

RALLWAYS, freights, recommendation re, (311).

KAY, Sir Joseph, Vice-President, Indian Central Cotton Committee: 48,224-48,350.

COTTON:

Cotton Ginning and Pressing Act, object of, 48,233, 48,252. Cotton ginning and pressing factories, extent of power over, and question of further legislation, 48,286-7.

Marketing, see that title below.

New varieties, position re, information to growers re, 48,249-50. Production, increase during last few years, 48,350. Research:

Grants to Provincial Governments, 48,274-5, 48,279-80. Indore Institute of Plant Industry, particulars re, financing of, &c., 48,227.

lxxviii

KAY, Sir Joseph—contd.

COTTON—contd.

Research—contd.

Progress of work, 48,226-8. Workers, supply, 48,328.

Seed distribution:

by Agricultural Department satisfactory, 48,284-5. the Function of the Agricultural Department, 48,327.

Small cultivators, question of attention to interests of, 48,291, 48,298.

Crops, work of Agricultural Department re improved types, 48,258.

DEMONSTRATION AND PROPAGANDA:

Cinema films, by G.I.P. Railway, 48,283. increased Propaganda, scope for, 48,283, 48,323.

Fertilisers, propaganda, scope for increase, 48,283.

IMPLEMENTS, ploughs and tools, scope for increased propaganda, 48,283, 48,323.

Indian Central Cotton Committee:
Contact with Ministers, extent of, 48,336-8.
Distinction of functions from those of Agricultural Departments,

48,313-4, 48,327.

Financial assistance of Provinces, possibility of, 48,329-30.

Financial position of, 48,332, 48,343.

Members:

Travelling allowance paid to up-country members, 48,341.

Tribute to, 48,341.

Objects of, 48,232.

Policy not to advocate merely growing of long staple cotton, 48,347.

better Price secured to producer as result of work of,48,273.

Proceedings, interpretation of, possible but has not been necessary,

48,311-2 Provincial Cotton Committees, proceedings, discussed by main Com-

mittee, 48,302. Publications, 48,317.

Relations with Imperial and Provincial Departments, 48,229, 48,232. Representation on;

of Actual growers, would be welcomed but difficulty of obtaining, 48,290.

of Co-operative societies, 48,243. of Growers, 48,234-5, 48,309-10. Trade, 48,344. Research scholarships, 48,282, 48,328. Research workers, type of, 48,281-2. Scope of work undertaken by, 48,333. Technological laboratory, 48,228.

Trade attitude re work of, 48,248, 48,344-6.

MARKETING:

Committees, representation of growers advocated, 48,325.

Cotton:

Grading of, for export, question not yet examined, 48,259-60. Ginning and baling, position re, 48,255-9. Improvement, importance of, and proposals, 48,250, 48,326.

Legislation for proper organised marketing advocated, law to be applied by Provincial Governments, 47,324.

Mixing of, legislation on lines of Sudan not considered desirable

at present, 48,256-7. Storage accommodation, not provided for in Bill, 48,305-6.

```
KEMBHAVI, N. R., Managing Agent, Bijapur Mahalaxmi Company: (460-
  469), 51,410-51,574.
     ADMINISTRATION:
           Co-ordination of effort on part of people and government needed,
              (463).
           Officers, more zealousness needed, (464).
Railway freights, market value of goods not considered in fixing,
              (468).
     AGRICULTURAL INDEBTEDNESS:
Oauses of, (464).
           Credit:
                Restriction of control not advocated, (464). Sources of, (464).
          Compound interest should be done away with, (464), 51,512-4. Deccan Agriculturists' Relief Act, results, (464). Mortgage and sale, restriction of right of, not advocated, (464). Repayment, reasons preventing, (464). Usurious Loans Act, enforcement not advocated, harm would be done by (464).
             done by, (464).
     AGRICULTURAL INDUSTRIES:
          Bee-keeping, proposed, (468).
          Hand spinning and weaving:
Disorganisation of, and bad results, (467).
Encouragement, desirability of, (467-8).
Machinery and factory production and obstacles in way of develop-
          ment, (467).
Poultry industry:
                Foreign markets needed for great development of, (468).
                Obstacles in way of development, (468).
     AGRICULTURAL LABOUR:
           Attraction to areas where shortage, means of, (468).
Uncultivated areas, starting of bunding and land improvement
              advocated, (468).
    BIJAPUR DEVELOPMENT ASSOCIATION, WORK of, (461), 51,464-7.
    BIJAPUR M
51,517-57.
                  MARALARMI COMPANY, particulars re, 51,417-61, 51,488-9,
    CO-OPERATION:
          Encouragement, proposal for, (469). Importance of all forms of, (469).
          Sale Societies, advocated, (462).
    CROPS:
          Cotton, Bijapur, poor quality and quantity, investigation advocated,
          Damage by wild animals, means of preventing, (466). Fruit and vegetable growing and flower gardens, (466). Maize, proposal, (466).
          Mungari juar, strain which will ripen within four months, need
             for, (465-6).
          Protection:
                External, investigation in well-equipped laboratory necessary,
                   (466).
               Internal, recommendations and advice of mycologists must be followed by agricultural farms, (466).
```

Tillage, deeper ploughing needed, (466). DEMONSTRATION AND PROPAGANDA:

Seeds:

CULTIVATION:

Distribution of proper seeds, importance of, (466).

Better quality, organisation of distribution advocated, (462).

Rotation, must be determined according to economic return, (466).

KEMBHAVI, N. R .- contd.

DEMONSTRATION AND PROPAGANDA—contd.

Expert advice, proposed means of inducing cultivators to adopt, (463).

Field Demonstrations, necessary, and proposal re working of, (463). Measures considered most successful, (463). Success, example of, (463).

DISTRICT DEVELOPMENT ASSOCIATIONS, scheme for, (461).

EDUCATION :

Agricultural:

Devihosur school, sons of middle-class people not attracted to, 51,563-70.

should Form part of primary and secondary education. (463). Schools:

one for Bijapur district, under consideration, 51,563, 51,571.

English must be taught in, 51,563-70.

no Agricultural interest given by, (462-3), 51,475, 51,515-6.

Veterinary, proposals for improvement, (467).

Adulteration, legislation advocated (465).

Ammonium sulphate, propaganda by firms, results, (463).

Chemical, manufacture in India not possible at present, (465).

Cowdung, means of preventing use as fuel, (465). Increase in use of, as result of work done by Messrs. Parry & Co.,

(465)Natural manures, need for conservation, and proposals, (465).

Oilcakes, supply, (465).

Phosphates, &c., effect of, investigation not sufficient, (465). Popularisation of new and improved, proposed means, (465).

FINANCE:

through Co-operative societies would be approved, for short-term and long-term loans, 51,477.

Facilities should be provided, (462). Financing of cultivators by Government body advocated, (464), 51,476.

Land Mortgage Banks, advocated in every district, (464).

Taccavi loans, strict supervision and lower rate of interest advocated, (464).

GROUNDNUT, damping of, practice and reasons for, 51,434-44, 51,526-30.

HOLDINGS:

1.1

Fragmentation, Hindu and Mahommedan laws a cause of, and proposed abrogation, (464), 51,479-81. Legislation, objections to, (465).

IMPLEMENTS, requirements, (462).

INDIGENOUS THEORY and traditional methods should be brought up to date, (462).

IRRIGATION, need for, in Bijapur district, (465).

MARKETING:

Cleaner picking required, (468).

Facilities satisfactory, (468).

Information to cultivators, &c., re market conditions, &c., advocated, (468).

System of marketing and distribution satisfactory, (468), 51,482-5.

MIDDLE-CLASS YOUTHS, agriculture not taken up by, owing to educational system, (462-3), 51,475.

OIL PRESSING INDUSTRY: 51,417-61.

Bye-product industry of making paints and varnishes, question of prospects, 51,505-11.

Embargo or duty on exportation of oilseeds desired, 51,490-3.

KEMBHAVI, N. R .- contd.

OIL PRESSING INDUSTRY—contd.
Failure of mills, probable reason, 51,495-8.
Ghanis, question of possibility of improvement, 51,550-7.
Government assistance, little scope for, 51,499-500.

Import duty not desired, 51,494. Oilcake, disposal of, 51,531-43.

Rotary mill, experimental putting up of, proposed by Government

but success doubted, 51,501-4. not Suitable for cultivators, 51,546-9.

RESEARCH:

Conferences between officers of different provinces useful, (463).

Economic, proposal and scheme for carrying out, (460-1).

Experts, pooling of services desirable, (463). Til seed, displacement by groundnut, 51,431-3.

VETERINARY:

Civil Veterinary Department:

Control by Director of Agriculture belonging to Indian Agricultural Service, objection to, (466).

should be Independent unless under administrative officer belonging to I.C.S., (466).

Contagious diseases:
Legislation advocated, (467).
Obstacles in way of dealing with, (467).
Veterinary aid during, should be dealt with by provincial authorities, (466).

Dispensaries

Control by Provincial authorities not advocated, (466).

under District Local Boards and system working well, (466). Expansion needed, (466).
Touring, advocated, (466).
full Use made of, if available, but most too far away, (466).
Education, proposals for improvement, (467).
Mobile corps for combating epizootic diseases, proposal, (467).
Preventive inoculation:

Fee charged in case of diseases other than rinderpest and

deterrent effect, (467). Obstacles in way of popularising, (467).

Research:

Muktesar, extension of scope advocated, (467). Provincial Institution advocated, (467).

Serum, no difficulty known of, (467).
Superior Veterinary officer with Government of India, appointment not advocated, (467).

KIRLOSKAR BROTHERS, Messrs., Ltd.: (352-6).

see also Gurjar, N.W., 50,283-50,438.

EDUCATION, compulsory, advocated, (355).

IMPLEMENTS:

Agricultural development societies, proposal for, at every village, (354)

Agricultural Engineers, Department of, at every District place, proposal, (353).

more Foreign ploughs sold in the Punjab than Indian-made ploughs, (355).

Manufacture in India:

Agricultural implement makers should be given preference in regard to import duty on steel and raw material imported by, should be exempted from duty, (352).

Design, difficulty re, and proposal, (353).

Duty on steel an obstacle, (352). Facilities for railway transport of raw material, need for, and proposals, (352-3).

KIRLOSKAR BROTHERS, Messrs., Ltd.—contd.

IMPLEMENTS—contd.

Manufacture in India-contd.

Government guarantee to purchase minimum number of imple-

ments every year, proposal, (353-4).

by Kirloskar Brothers, history of, and difficulties experienced, (352).

Magazines published by, (355).

Sale, method, 50,438.

Obstacles in way of, and proposals for encouraging, (352-6). Packing wood, etc., should be supplied at comparatively cheaper

rates, (353).
Travelling salesmen, concession rates on railways and assistance

by Agricultural Departments advocated, (355).

Popularisation, proposed means, (354), (355).

Purchase of, by Stores Purchase Department of the Government of

India, proposal, (356).

Railway classification, complaint re, (355).

Railway rates, reduction advocated, (354), (355).

Railway transport facilities, need of improvement and proposals,

(354-5).

Sale of, proposed means, (354).

KOTHAWALA, NARIMAN R.: (476-89), 51,575-51,680.

ADMINISTRATION:

Governor of each Presidency should be empowered to administer agriculture in co-ordination with Local Governments, (487).

Postal service in villages, inadequate and extension advocated, (478).

Railways

Facilities to cultivators by reduction of fares and goods rates advocated, (478). special Rates for agricultural implements advocated, (482).

Roads, village:

Bad conditions and local fund should be expended on improvement, (478). Improvement advocated, (484), (485).

AGRICULTURAL INDEBTEDNESS:

Banias, rates charged by, 51,596-7.

Causes, (478), (487).

Credit:

Restriction of control, undesirability, (478).
Sources of, (478), (487).
proposed Means of lightening burden of debt, (478), (487).
Mortgage and sale, restriction on right of, undesirable, (478-9),

Redemption of land, shortening of procedure needed, (478). Repayment, reasons preventing, (478), (487). Usurious Loans Act, enforcement, application not necessary, (478).

AGRICULTURAL INDUSTRIES:

Spinning and weaving, compulsory training in primary schools, advocated, (488).
Time spent by cultivators on holdings, (488).

AGRICULTURAL LABOUR:

Attraction to areas where shortage, proposed means, (488). Attraction of, to waste land, proposed means, (484). Shortage due to competition of industrial towns, (484), (489).

AGRICULTURAL SERVICE, insufficient and increase in staff needed. (478).

lxxxiii

```
KOTHAWALA, NARIMAN R.—contd.
      ANIMAL HUSBANDRY:
            Bulls, price, increase above pre-war, 41,668-70.
Cattle-breeding:
                  by Roaming tribe of Mahommedan Sindhis, (483).
Unprofitable now no longer demand for export, (482-3), 51,620-2,
            Co-operative cattle breeding societies, success doubted under present
            circumstances, (484).

Dairying industry, need for improvement, (483).

Dual purpose animal, Gujarat breed suitable, 51,642, 51,650.

Export of cattle, former trade, 51,630-8.
            Fodder:
                  Dry, absence of, in dry season, (483).
                  Grass depots at each taluka headquarters advocated, (488).
                  Salt in ration, necessity for, (483).
Shortage, and periods of, (483), (488).
Silage making:
                        Desirable, (483).
not Taken to easily by cultivators, (483), 51,624-5.
                  Supply, (483).
            Grazing:
                  Enclosed pastures, absence of, (483).
Grounds, lack of, 51,653-6.
Overstocking of common pastures and bad results, (483).
           Rates, 51,654.
more Waste lands for, in villages, advocated, (488).
Improvement of breeds, proposals, (486), (488), 51,623, 51,647-50.
Improvement of draught and milch cattle, need for, but difficulties,
           (482).
Kankrej breed, purpose of, 51,641-2.
Mixture of Kankrej and Gujarat breeds good for milking and
               draught purposes, 51,637.
            Work animals:
                  non-Castration, (482), 51,657-60.
Local demand for, 51,643-6.
     CAPITAL, attracting of, to agriculture, proposed measures, (485), (489).
     Co-operation:
           Administration should be by non-officials, (489).
Cattle-breeding societies, success doubted under present circum-
            stances, (484).

Change in system of advancing money to cultivators on security of
               holdings, &c., advocated, (489).
            Credit Societies:
                  Government financial assistance, proposal, (484).
Rates of interest should be as low as possible, (489).
                  South Daskroi taluka, (489).
            Encouragement by Government advocated and means of, (484), (489).
           Improvement societies, would be beneficial, (484).

Joint improvement schemes, compulsion on minority might be use-
              ful, (484).
            Purchase societies, advocated, (489).
           Sale societies, necessity for, (489).
Seed stores advocated, (489).
```

Crops:

Damage by birds and stray cattle, (481).

Damage by wild animals, and proposed means of preventing, (481), (488).

Improvement, means of, (481).

Improvement, means of, (481). Introduction of new, proposals, (481). Profitable, change to, advocated, (488).

advocated, (488 lxxxiy

KOTHAWALA, NARIMAN R.—contd.

```
CROPS-contd.
       Protection:
             External, efficacy not understood by cultivators, and no measures taken to train, (481).

Internal, need for measures, (481).
       Seeds, big seed depots at proposed Government taluka farms advo-
          cated, (481).
CULTIVATION:
       Mixture of crops, recommendation, (481)
       Rotation, understood by cultivators, (481).
       Tillage, means of improving, iron ploughs, (481).
DEMONSTRATION AND PROPAGANDA:
      on Cultivators' fields, not advocated, 51,678-9.
Demonstration farm for each taluka, advocated, (477), (486),
          51,677-9.
       Expert advice, means of inducing adoption of, (477). Inadequacy of measures, (477).
       Success, example of, (477).
EDUCATION:
       Adult, means of popularising, (477).
       Agricultural:
             in All colleges, as optional subject, advocated, (489).
             College in Gujarat, advocated, (486).
Control by Agricultural Department advocated, (477).
             in Elementary and middle schools, proposal, (484).
             Facilities, need for, (477).
on Government farm in each taluka advocated, (477), 51,586-9.
             Higher or collegiate education, proposal, (484). Incentives inducing lads to study, (486-7). in Middle schools advocated, (489). in Primary schools advocated, (486), (487), (489).
            Students:
            After-careers, (477), (487).
Source of, (477), (487).
Supply of teachers and institutions insufficient, (476), (486).
      Teachers, drawing of, from agricultural classes advocated, (477).
Technical training, increased facilities needed, (487).
Financing of, proposal, (477).
     Improvement, importance of, (486).
Interest of agriculturists alienated to other avocations, (489).
Nature study advocated, (477), (484).
     Primary, rural schools:
free Compulsory, advocated, (485).
Reason for small proportion of boys in schools (485).
     Spinning and weaving, compulsory training advocated, (488). School farms, advocated, (477). School plots, proposal re, (486), (487). Teachers in village schools, should be drawn from agricultural elegence (486).
     Teachers in vi
classes, (486).
      Village schools with farms attached, proposal, (477).
      Artificial, scope for increased use of, (480).
      Cowdung, use as fuel, prevention advocated and means of, (480), (481), (488), 51,661-7.

Natural:
            Increased use of, scope for, (480).
Insufficiency, (488).
Proposals for encouraging use of, (481).
```

Popularisation, proposed means of, (480). FINANCE:

Advances on easy instalments and without interest, desirable, (487). Agricultural banks, advocated, (4781, (478-9).

KOTHAWALA, NARIMAN R.—contd.

FINANCE contd.

Central Farmers' Bank in each district at least advocated, (489). Taccavi loans:

Instalments should be small and over long periods, (478). Interest, reduction advocated, (478), (487), 51,596-8. Payment through special banking facilities advocated, (478). Procedure too lengthy and troublesome and expediting advocated, (478). cated, (478).

HOLDINGS

Consolidation :

proposed Means, (479). Obstacles in way of, (479), (487).

Fragmentation:

Evil of, (479). Minimum acreage should be fixed by law, (479), (487), 51,616-9. proposed Measures re, (487).

Adoption of improved, means for hastening, (481).

Distribution, requirements, (481-2).

Improved: Examination of soil needed in connection with, 51,674.

Use of, by witness, 51,671-6.
Introduction of modern types preferable to improvement of existing,

(481).

Iron ploughs, introduction, steps taken by witness to induce, (477), 51,590-5, 51,609-15. special Railway rates advocated, (482).

IMPROVEMENTS, factors discouraging carrying out of, by landowners, (485), (489).

IRRIGATION:

Canals:

Distribution of water, unsatisfactory and suggestion, (488).

Wastage of water by absorption and evaporation, proposed means of preventing, (480).

Field ponds, filling in of, by sitt and keeping up of, out of revenue

Field ponds, filling in of, by silt and keeping up or, out of revenue collected as himayat proposed, (488).

Management of, by Agricultural Department, proposal, (488).

North Gujarat, need for perennial scheme and proposal, (479-80), (480), (481), (483-4), (485), (487), 51,599-603.

Pumping, personal experience, 51,579-85.

Rain water money should not be charged when crops fail, 51,679-80.

Sabarmati irrigation scheme, particulars of, and carrying out of, advocated, (479-80), (480), (483-4), (485), (487), 51,599-603.

South Daskroi taluka, insufficient and proposed measures, (487), 51,680.

51,680.

Tanks and ponds, drying up of, (480).

Boring of, proposed assistance to cultivators, (488).
Useful but dry up in dry periods, (480).
Wells, pends, canals, etc., drying up of, in South Daskroi taluka, (486), (488).

LAND:

should be Given by Government to occupants on old tenure only,

New tenure, abolition advocated, (489).
Permanent tenures advocated, (487).
Rent, should be fixed at double the assessment, (487). Tenure, proposals, (485-6).

LAND REVENUE, permanent settlement advocated, (485-6).

MARKETING:

Defects, (489).

Information from foreign countries should be published by Government, (489).

KOTHAWALA, NARIMAN R.-contd.

MIDDLE-CLASS YOUTHS, means of attracting, to agriculture, (477), (487). RATE OF EXCHANGE, 18d., objections to, (489).

Research, proposals, (476).

Some:

Deterioration, example of, (480). Drainage, need for, in certain parts, (480). Erosion by flood water, prevention possible by construction of kutcha bunds, (480). Improvement, example of, (480).

Annawari estimate, should be made on standard fixed by Government, (485).

Areas under cultivation and crops, not satisfactory and proposal, (485).

Census, every five years advocated, (485).

Collection by leading agriculturists in co-operation with officials of Revenue and Agricultural Departments advocated, (489).

Economic survey of rural population advocated, (486). not Published in convenient and handy form and difficulty of public in obtaining, (486). Yield, not satisfactory and proposal, (485).

Civil Veterinary Department, control by Agricultural Department advocated, (482).

Contagious Diseases:

Education of cultivators advocated, (488). Obstacles in way of dealing with, and proposal, (482).

Spread of, owing to inadequate grazing facilities, (483).

Dispensaries: Administration, question should rest with Local Boards or with

Agricultural or Veterinary Departments, (482), (488). under Local Boards and not working satisfactorily, (482). Needed in South Daskroi taluka, (488).

Touring, need for, (482).

Transfer to control of provincial authorities advocated, (482).

full Use not made of, as too far from villages except for some surgical treatment, (482).

Preventive inoculation, obstacles in way of popularising, (482). Staff, increase needed, (478).

Welfarm of Rural Population:
Economic inquiries, advocated, and proposed means of carrying out, (485), (489).
Improvement, proposals for, (485), (489).
Village life must be improved, (484), (485), 51,604-8.
Well maintained and organised village panchayats advocated in

all villages, (489).

Lac culture, see under Agricultural Industries.

should be Given by Government to occupants on old tenure only, Kothawala (485).
Inamdari system, Naik 50,153-7, 50,185-90, 50,216-8, 50,235-43.
Narvadari tenure, G. H. Desai 49,300-3; Gordon 51,038-43, 51,139.
New tenure, abolition advocated, Kothawala (489).

RACK-RENTING:

in Kaira and enquiries should be made with view to legislation, Gordon 51,037, 51,137-8.

Legislation against, advocated, G. H. Desai 49,296-7.

lxxxvii

Land-contd.

RACK-RENTING-contd.

Prevention by law would be approved, Devadhar 49,596.
Provision against, advocated, Sir L. S. Mehta 48,997-9000.
Record of rights, village officers should hold offices in villages and make records available to people, Gordon 51,151-3.

Comparison with assessment, Kaira district, Gordon 51,050. should be Fixed at double the assessment, Kothawala (487). Percentage of produce in Kolaba district, Gordon 51,046-9. Ryotwari system, Naik 50,183-4. Talukdari system, Gordon 51,140-3.

TENURE:

proposals, Kothawala (485-6), (487).
Statistics, improvement advocated, Gordon (418-2).
System, need for change, Naik 50,181-2.
System in South Africa and India, comparison, Naik 50,219-29.

Land Mortgage Banks, see under Finance.

Land Revenue:

ASSESSMENT:

Concessions to settlers on new land advocated, D. P. Desai (319). Exemption of Improvements by Cultivators from increase:
in Baroda, G. H. Desai 49,110, 49,194-6.
in Theory but not always in practice, G. H. Desai (194).

High rate of, Naik 50,249-69.

High rates of, Nath 50,225-05. Highness of, a hindrance to men of capital taking up agriculture, Naik (340).

Periodical, factor discouraging carrying out of improvements, Naik (340).

Prices of abnormal years taken by Government in fixing, Naik 50.270-81.

should be Reduced and made permanent, D. P. Desai 50,010-12,

50,102-5. Reduction advocated in certain districts, D. P. Desai 50,084-91. Revision, factors taken into consideration, Gordon 51,114-7.

COLLECTORS:

Responsibility for general economic welfare of the people, position re, formerly and at present, and proposals, Gordon 50,988-93, 51,132-4, 51,156-66.

should Take interest in co-operation, Gordon 51,131.

closer Co-ordination with agriculture needed, Naik (338). closer Touch with Agricultural and Veterinary Departments advo-

cated, Gordon (416).

Glutting of local markets at time of payment of, V. L. Mehta 48,877-80. Inamdari system, Naik 50,153-7, 50,185-90, 50,216-8, 50,235-43. Increase, improvements discouraged by danger of, Nagpurkar (374). Increased demand feared as result of consolidation of holdings, D. P. Desai (315).

Liberal policy, need for, D. P. Desai (315).
Payment, borrowing for, V. L. Mehta 48,877-80; Bhagwat 51,307-9.
Payment through village organisation, proposal, D. P. Desai 49,967, 50,006-10.

Percentage of net rents taken by Government, Naik 50,249, 50,250. Proportion of produce, &c., taken in, Sir L. S. Mehta 48,974-6; D. P. Desai (315), 50,011, 50,018-25; Gordon 51,044-5. Remission, proposed encouragement of consolidation of holdings by, for limited period, G. H. Desai (191), 49,058-61.

Land Revenue-contd.

Re-modelling of policy necessary to remedy evil of fragmentation of holdings, D. P. Desai (315).

SETTLEMENTS:

Long period, improvements would be encouraged by, G. H. Desai (194).

Period in Baroda, G. H. Desai 49,110. Permanent, advocated, Kothawala (485-6). System, taking up of agriculture by men of capital hindered by, Naik

Landowners:

INTEREST IN ANIMAL HUSBANDRY:

Increase, propaganda and demonstration advocated for, Naik (339). proposed Means of encouraging, G. H. Desai (183).

Improvements by, see that title.

Managers for estates of, need for, and proposal re training, Ransing (387), 50,743-5.

Liquor and Drugs, consumption believed to be increasing, and attitude of Salvation Army re, Peck 49,651-5, 49,667-74.

Lucerne, see under Crops.

Maize, see under Crops.

MANN, Dr. Harold: 48,549-48,631.

EDUCATION, AGRICULTURAL COLLEGES:

Lyallpur, students from Sind sent to, formerly, but abandonment owing to charge of full cost by Punjab Government, 48,624-8.

Poona, students from Sind, 48,623-4.

Sind, need for, and proposal re, 48,566, 48,599, 48,624-30.

increasing Demand for research, demonstration and education, Development in, policy of Government and Legislative Council re, 48,549-50.

SUKKUR BARRAGE:

Alkali formation, danger of, but possibility of meeting, and need for increased funds, 48,620-2. Auctioning of land, speculators would be encouraged, 48,577-8. Conditions on Right and Left Bank, differences, 48,555-7, 48,604-10. Development work under, budget, 48,596-600. Distribution of land, method not yet settled, 48,573-4, 48,617-9. Encouragement of small holders hoped for, 48,570-2. Land to be squared on Punjab system, 48,579. Larkana farm, 48,583-6. Progress and policy of Government re, 48,549-51, 48,580-2, 48,588-692

48,588-622.

Sakrand station:

future Demonstration staff, 48,564-6, 48,614-6. Indian Central Cotton Committee grant for work at, 48,576. Research staff, 48,558-63, 48,575-6. Scientific staff, possibility of obtaining, 48,590-3. Sub-stations, 48,552-5.

Marketing:

Arecanut sale societies, success of, Devadhar (234). Billimor, Navasari District, system, G. H. Desai (189). Bulletin in Kanarese, proposal, Shirhatti (296).

lxxxix

```
Marketing-contd.
```

```
COMMITTERS:
```

Proposal, G. H. Desai (188-9), (189).

Proposal, G. H. Desai (188-9), (189).

Representation of growers:

Advocated, Kay 48,325.

no Difficulty of finding right men, Burt 48,402-3.

Essential to proper working, Burt 48,401.

if Impossible, nomination of representative by Department of Agriculture worth considering, Burt 48,404-5.

Whalatime man need for as work much neglected at present. Shir-

Whole-time man, need for, as work much neglected at present, Shirhatti (293).

Co-operative Sale Societies:

Advantages of, Shirhatti (292).

Advocated, V. L. Mehta (110), 48,750-1, 48,754; G. H. Desai (189);

Devadhar (233-4); Kembhavi (462).

Benefits derived from, V. L. Mehta (114).
Binding contracts between members and society, not possible under
Act, Indian Central Cotton Committee (29); Burt 48,419-21.

Combination with co-operative purchase desirable, V. L. Mehto (113).

Combination with credit and purchase societies advocated at first, G. H. Desai (191).

Co-operation with credit societies, proposals for, Shirhatti (290). Co-operative finance must go hand in hand with, Devadhar (234).

Cotton, see that title below.

Essential, and proposal, Sir L. S. Mehta, (142), 48,949. Financing of members by, in areas without credit facilities, proposal, (290).

Government assistance, need for, and proposals, Devadhar (234-5). Gur and manure, statistics, 1921-1926, Mehta (113). Jaggery, Mehta 48,751.

jaggery, Menta 48, (31.
in the Karnatak, working of, Devadhar (234).
for Manures, in certain districts, Devadhar (229-30).
Need for, Peck (276); Kothawala (489).
Propaganda, proposals, Shirhatti (291-2).
Requirements for success and proposals, V. L. Mehta (114).
Sale of produce through, should be condition to receiving loan from credit societies, Shirhatti (290).

Cotton: V. L. Mehta 48,751.

Adulteration of Punjab-American cotton, Indian Central Cotton Committee (20).

Auction in public markets, opinion re, and dislike of buyers to, Burt 48,417-8. Berar:

Conditions, Burt 48,308.

Markets, defects of, and proposals for improvement, Indian Central Cotton Committee (15-16).

System, Fotiadi 50,807-11. Bombay (District) Cotton Markets Bill, proposed inclusion of ginning and pressing factories, Burt 48,407-13.

Brokers should be abolished, Karmarkar 49,923.

Cleaner picking required, Kembhavi (468).

principal Complaints against Indian cottons, and possible measures

for remedying, Indian Central Cottons, and possible measures for remedying, Indian Central Cotton Committee (22-25).

Control by market committee over transactions in compounds of ginning factories:

Advocated, Burt 48,266-7.
Opinion re proposal, Fotiadi 50,816.

Co-operative:

Aim of, and advantages, Shirhatti (286-8), (296-7), 49,782-8. Assistance would be given by Indian Central Cotton Committee, Burt 48,539-41. Collecting centres, scheme, Shirhatti (290-1).

Marketing—contd.

```
COTTON-contd.
          Co-operative—contd.
East Khandesh societies, wound up, Ransing 50,782.
                    Gadag market:
                             Boycott of Ralli Brothers for dealing with, Calvocoressi 50,828-30.
                             Boycotting of, by dalals, etc., Shirhatti 49,762-79; Karmarkar 49,913, 49,921.

Method of working, membership, etc., Shirhatti 49,766-79; Karmarkar 49,884-90, 49,901-2, 49,907-21, 49,924-5.
                  Hubli Sale Society:

Committee of Management, Shirhatti 49,698-705.

Evidence on behalf of, see Shirhatti, Rao Sahib G. S., (283-297), 49,697-49,926.

Improvement, suggestions for, Shirhatti (292-3).

Method of working, profits, etc., Shirhatti (292-3), 49,706-61, 49,821-56, 49,869-83, 49,897-901, 49,906.

Sale of seeds, Shirhatti 49,724-8, 49,782-7.

Improvement of system, suggestions for, Karmarkar (311).

Increase advocated, Naik 50,246.

Karnatak Co-operative Central Cotton sale organisation, scheme for, Shirhatti (296).
                        for, Shirhatti (296).
                  Larger area of operation needed, Shirhatti (292). very Little of, at present but good on principle, Fotiadi 50,827, 50,831-2.
                  Need for, Shirhatti (286).

Obstacles to progress of movement, Shirhatti (288), 49,789-96.

Particulars re, Indian Central Cotton Committee (29-31); V. L.

Mehta 48,751.

not Popular with brokers, Fotiadi 50,824-6.

Societies should also sell other agricultural produce, Shirhatti
                        (291).
                  Sousak Cotton Sale Society, Naik 50,174.
Success of, Devadhar (234).
       Dalals:
                  Reason for cultivators preferring to sell to, Ransing 50,783-6. System and defects, Indian Central Cotton Committee (16).
       Damping of, in factories and objection to, Fotiadi 50,928-35, 50,936; Calvocoressi 50,935-6.
       Deductions by purchasers outside area of market and beyond control of authorities, reply to complaint, Fotiadi 50,815-6.
       Dhulia market:
       Particulars re, and system in, Ransing (390-1), 50,693.

Regulation, proposal for, Ransing (391), 50,687-90, 50,694-7.

Disputes after weighment, possible methods of settling, Burt 48,406.

Export, competition of American cotton, Burt 48,268.

Ginning and baling, position re, Indian Central Cotton Committee (20-22); Kay 48,255-9.

Grading of cotton for export, question not yet examined Kay
       Grading of cotton for export, question not yet examined, Kay 48,259-60.
       by Growers, facilities and defects, Indian Central Cotton Committee
             (15-17).
       Improvement, importance of, and proposals, Kay 48,250; Karmarkar
             49,923-6.
        Information re Bombay prices, etc., system in, Hubli, Shirhatti
             49,856-7.
      19,500-7.
Information re market conditions:
Facilities, Indian Central Cotton Committee (27-28).
Recommendation, Indian Central Cotton Committee (28).
Judging of quality of cotton as kapas or as lint, Burt 48,398.
Karachi market, conditions, Indian Central Cotton Committee (20).
in Khandesh, conditions, Indian Central Cotton Committee (16);
Burt 48,308.
```

Marketing-contd.

Corron—contd.

Legislation for proper organised marketing advocated, law to be applied by Provincial Governments, Kay 47,324.

Markets outside or inside town, a matter of local convenience, Burt 48,414-6.

Mixing of: Fotiadi 50,821-3.

Desi cotton with Punjab-American, and measures taken for dealing with, Indian Central Cotton Committee (23-25).

Different varieties of, Egyptian and Sudanese regulations for preventing, Indian Central Cotton Committee (25-27).

Legislation on lines of Sudan not considered desirable at present, Kay 48,256-7.

Northern Gujarat, conditions, Indian Central Cotton Committee (16).

Organisation of markets as in Berar advocated, Shirhatti (294). Organisation of markets as in Berar advocated, Shirhatti (294). Price received by cultivator, connection with general reputation of tract, Burt 48,400.

Regulated open markets controlled by Committees, recommendation, Indian Central Cotton Committee (5), (15).

Regulation of markets and appointment of market committees, proposal, Ransing (391), 50,687-90, 50,694-7.

Sale of crop before picking, Shirhatti (285), 49,780.

Separate cotton markets, need for, in district doubted, Naik 50,246-7.

50.246-7.

Southern Maratha country, names of market places and statistics of quantities and values, Shirhatti (285). Storage:

Accommodation:

Berar, provision under consideration, Burt 48,307.
not Provided for in Bill, Kay 48,305-6.
Arrangements, Shirhatti 49,900-1, 49,906; Karmarkar 49,901-2.
Difficulty as kapas would have to be mixed, Fotiadi 50,817.
Surveys by Indian Central Cotton Committee, Burt 48,387-91, 48,483-4.

System, Shirhatti (285-6), 49,807, 49,809; Naik 50,166-74. Value received by cultivators, question as to fairness of, Fotiadi

50,818-20. Weights and measures, Shirhatti 49,801-6.

Standardisation advocated, Shirhatti (293), 49,808. Wholesale:

Estimated Indian crop, exports, mill consumption and Bombay stocks on 31st August, seasons 1921-22 to 1925-26, Indian Central Cotton Committee (17).

Particulars re, and possibilities of improvement, Indian Central Cotton Committee (17-28).

Receipts of raw cotton into chief ports of India from year ending 31st August, 1922-23 till 1925-26, Indian Central Cotton Committee (19).

Receipts of various growths of cotton into Bombay from 1st September to 31st August for the years 1921-22 to 1925-26, Indian Central Cotton Committee (18).

Work of Indian Central Cotton Committee re, (5).

Dalals or agents of middlemen, proposed formation of associations to regulate conduct of, Devadhar (234), 49,338-9.

Exporting firms, question of extent of knowledge re cultivation, Catrocoressi 50,917-21, 50,939-42.

Adequate though not quite satisfactory, Bhagwat (443).

Satisfactory, Kembhavi (468).
Satisfactory but systems of marketing and distribution not satisfactory, Nagpurkar (373).
Unsatisfactory, Shirhatti (283); Indian Merchants' Chamber,
Bombay (512).

```
Marketing—contd.
```

Fixing of grades and standards for All-India produce, extent to which

desirable, Calvocoressi 50,922-3.
Glutting of local markets at time of payment of land revenue, V. L.

Mehta 48,877-80. Grading, etc., not critical questions for small farmers, only for exporters, Nagpurkar (373).
Grading officers, Government appointment of, would be approved, Devadhar 49,599-600.

GRAIN

Elevators:

Feasibility in Bombay doubted as quantity of sufficient, Calvocoressi 50,868.

Difficulties in connection with, Calvocoressi 50,868-9. doubted as quantity of wheat not

Sale society, Sukkur, Devadhar (234). System, Bhagwat (444).

Co-operative sale societies, V. L. Mehta 48,751; Bhagwat (444),

Poona and other markets, system, Bhagwat (443-4).
Sale society, Poona, Devadhar (234).
Systems and suggestions for improvement, V. L. Mehta (111).
Improvement, proposals for, Devadhar (234); Shirhatti (296).

Information to Cultivators, etc., on Market Conditions, etc.:
Advocated, Naik (340); Kembhavi (468).
proposed Means of, V. L. Mehta (111).
Proposal, Devadhar (235); Ransing (391).
Publication in English, proposal, Shirhatti (296).
might be Supplied but little benefit anticipated at present, Bhagwat

(444).

Useless at present owing to illiteracy, Indian Merchants' Chamber, Bombay (512). Information from foreign countries should be published by Government,

Kothawala (489). Markets should be within Municipal boundary, Ransing 50,692-3.

Merchants, margin of profit, Naik (340).

MIDDLEMEN:

Charges not excessive, Walchard Hirachard 51,832-3. Interests of, Calvocoressi 50,944-8.

POTATOES:

in Poona, Bhagwat (444), 51,252-8. Sale society, Sind, Devadhar (234).

Quality, grading and packing, no demand for improvement by Indian consumers but steps proposed to induce, Bhagwat (444).

Raising of grade and standard of Indian produce, possibility of, with propaganda and very strict legislation and supervision, Calvocoressi 50,911**-16.**

Reputation of Indian goods, measures for improvement of, would be approved, Walchand Hirachand 51,841-5.
Sale by weight, gradual compulsion advocated, Bhagwat (444).

Standardisation of produce, need for, and proposal, G. H. Desai (189), 49,092-4, 49,265-72

Surat district, Naik (340).

System of marketing and distribution satisfactory, Kembhavi (468), 51,482-5.

Systems and defects of, V. L. Mehta (110); G. H. Desai (188), (189); Devadhar (233-4); Kothawala (489).

Transport and communications, backwardness of Bombay Government as

regards, Walchand Hirachand 51,821-4.
Transport facilities inadequate, Naik (340).
Unsatisfactory arrangements, Naik (340).
Vegetable market, Poona, system and conditions, Bhagwat (444).

Marketing-contd.

WEIGHTS AND MEASURES:

Standardisation advocated, G. H. Desai (189); Bhagwat (444), 51,408-9.

advocated, V. L. Mehta (110-1); Devadhar (234); Uniformity Nagpurkar (373).

Adulteration and damping, no complaints, Calvocoressi 50,870.

Adulteration by dirt, improvement, Calvocoressi 50,876-80.
Clean wheat, question whether value received for, Calvocoressi

50,883-8.
Holding of, for longer period by cultivator than formerly and effect, Calvocoressi 50,871-4.

Purchase methods of Messrs. Ralli Brothers, Calvocoressi 50,858-60. Standardisation of produce, need for, and proposal, G. H. Desai

MEHTA, J. 51,787-52,146. K., Secretary, Indian Merchants' Chamber, Bombay:

AGRICULTURAL INDUSTRIES:

Hand spinning, possibilities of, and proposals for development, 51,818-20, 51,908-19, 51,949-54, 52,010-52, 52,092, 52,139-42. Instruction in agricultural bias schools advocated, 52,143.

Weaving:

no Caste prejudice against, known of, 51,914-8.

Mill yarn v. handspun yarn, 52,022-41.

Professional weavers, 51,911-2, 51,196-7, 52,021.

not Possible as part time occupation, 51,911-4, 52,017-21.

Holdings, legislation, opinion re, 52,102.

Indian Central Cotton Committee, money spent on putting up plant at Matunga, objection to, 51,926-35, 52,009.

Indian Merchants' Chamber, representation on Central Cotton Committee, 52,145-6.

RESEARCH, financing of, by export cess on wheat, question of attitude of Indian Merchants' Chamber, 52,096-8.

MEHTA, Sir LALUBHAI SAMALDAS, Kt., C.I.E.: (138-143), 48,938-49,031.

ADMINISTRATION:

Board of Agriculture, popularisation of, and association of unofficial workers with, advocated, (140).

Meetings between officers of Agricultural Departments, extension advocated, (140).

AGRICULTURAL DEPARTMENT, little attention paid by non-officials to, and to agriculturists until recently, 48,953-4.

AGRICULTURAL INDEBTEDNESS:

Causes of, (141).

Means for lightening burden of debt, (141).

Mortgage and sale, limitation of right of, should be confined to backward, &c., areas, (141).

AGRICULTURAL INDUSTRIES:

Bombay Provincial Bank memorandum, general agreement with, (142).

Regional surveys of rural crops and industries, proposal, (142). Subsidiary industry, ordinary cultivators unable to maintain themselves without, 48,985-6.

Animal Husbandry, fodder, famine reserve, 49,015.

Co-operation

Bombay Provincial Bank:

Branches, Government facilitation of opening of, proposal for, (140), 48,948.

Memorandum agreed with, generally, (139). Encouragement of growth of, proposed means, (142-3).

MEHTA, Sir LALUBHAI SAMALDAS-contd.

Co-operation-contd.

Extent to which rural leaders trained by, 48,960-3.

Irrigation societies, proposal, (141).

Local unions, proposals for encouragement, (143). Non-officials, work of, 48,954.

Organisation of movement, 48,959. Progress of movement, 48,941.

Sale societies, organisation essential, and proposal, (142), 43,949. Sowcar must be replaced by, (140), 48,947. Surpluses of sub-treasuries, deposit of portion with local central banks or branches of larger banks, advocated, (140), 48,948. Transfer of funds, facilities advocated, (140). Wholesale society in Bombay formerly, (142).

Crovs, improvement, work of Agricultural Department, 49,017-9.

Demonstration and Propaganda:
Demonstration farms, education of people to understand advantages of, needed, 49,020.

Requirements for success, (140). Taluka associations, value of work of, 49,024.

EDUCATION:

Adult:

Definite system needed, (140).
Work of Sir Vithaldas Thackersey re, and abandonment after his death owing to financial difficulties, (140), 48,955-8. Agricultural:

Incentives to taking up, (139).

Re-direction of rural education, need for, (139).

Special facilities for agricultural areas advocated, (139).

Taking up of, with view to sticking to agriculture, not merely for Government posts, advocated, 48,945-6.

Teachers, opportunities should be given to agricultural classes

to qualify as, but no class distinctions should be made in

making appointments, (139). Literacy, small percentage of, (139).

Primary:

Popularisation of, proposed means, (143). Poverty a reason for withdrawal of children from school, (143). University Students as rural leaders, question of, 48,964-5.

FERTILISERS, Adoption of: Co-operative movement, value of, (142).

Economic factor, (142).

Land mortgage credit, proposals re, (141).

Short-term credit, co-operative method the most suitable for, (140).

Administration:

Interesting of village community in, advocated (142).

Methods not in consonance with agriculturists' interests, (142).

Restrictions on grazing and use of firewood, enforcement:

Duty should be entrusted to local panchayats, (142).

too Rigid, (142).

HOLDINGS, Consolidation:
Bombay draft legislation generally accepted, (141).

Legislation necessary, 48,981-2.

Punjab system approved, (141).

IMPLEMENTS, Adoption of new and improved: Co-operative movement, value of, (142).

Economic factor, (142).

INTERNATIONAL INSTITUTE OF AGRICULTURE AT ROME, Indian delegate advocated, 48,938.

INDRY.

MEHTA, Sir LALUBHAI SAMALDAS-contd.

IBRIGATION:

Co-operative societies, proposal, (141). Minor schemes

Development, comprehensive policy should be carried out, (141),

49,015.

Staff, proposal re, (141). Wells, decline of water in, 48,951.

LAND REVENUE, proportion of gross income taken in, 48,974-6.

LAND SYSTEM, provision against rack-renting, advocated, 48,997-9000. RESEARCH, interchange of results between provinces advocated, (140).

WELFARE OF RUBAL POPULATION:

Amenities of rural areas, proposals for increasing, (143), 48,950.

Area of land required to maintain family of three people in wet and dry lands, 48,988-94.

dry lands, 48,988-94.

Board of Rural Economic Inquiry, proposed formation of, (143), 48,977, 48,979, 49,011.

Economic condition of agriculturists in ryotwari and zamindari tracts, comparison advocated, (189).

Economic condition of the people, little genuine interest shown by Central and Provincial Governments, (138), 48,952.

Medical relief, proposal for provision of, (143).

Non-official agencies, need for work by, and encouragement of, 49,030-1.

49,030-1.

Physical condition of people, 48,995, 49,001-3. increasing Poverty, (138), 48,942-4, 48,966-76, 48,978-80, 49,005-10, 49,021-3.

increased Production necessary, 48,996, 49,013. Sanitary and hygienic improvement, Panchayats could undertake, (143).

Society for the Service of Rural India, response not likely to be ade-

quate, 48,983-4, 49,025-30.
Staff, requirements, (143).
Systematic effort to improve position of agriculturists needed, 49.015.

Taxation levied in rural areas, great portion of proceeds must be utilised in those areas, (143), 48,950-1.

Thrift, need for instruction in, and work of co-operative movement rc, 49,024.

MEHTA, V. L., Managing Director, Bombay Provincial Co-operative Bank. Ltd.: (103-115), 48,632-48,937.

AGRICULTURAL INDESTEDNESS:
Oauees of, (106), 48,734-43, 48,822-5, 48,903-4, 48,934.
Change in old-time rural economy as factor in connection with,

Change in old-time rural seconomy as factor in connection with, (106), (107), 48,875-6.

Compounding of portion of debt by sowcars, proposal, (108).

Gredit, sources of, (107), 48,744-5.

Means of lightening burden of debt, (107-8).

Moneylending by Pathans, (107), 48,744-5.

Redemption of debt through co-operative societies, and proposal re, (108), 48,723-7, 48,815-21, 48,933.

Repayment, reasons preventing, (107).

AGRICULTURAL INDUSTRIES:

Cloth manufacture, proposal, (109-10). local Co-operative organisations, proposal, (110).

Dairying, requirements for success, (109).

Dairying, requirement of proposal for, (110), 48,832-45.

'Encouragement of proposal for, (110), 48,832-45.

Introduction by All-India Spinners' Association in certain districts, 48,746-9.

The proposal of the proposal proposal (110), 48,914-6.

Home Industries Association, Bengal, and proposal, (110), 48,914-6. not Necessary if productive capacity of agriculture can be increased, 48,749.

MEHTA, V. L .- contd.

AGRICULTURAL INDUSTRIES-contd.

Plying of earts for hire, (109).
Poultry-keeping, position re, (109).
Preparation of agricultural products for consumption, possibilities

of, and requirements for success, (110). Revival of, a means of lightening burden of debt, (107). Time spent by cultivator on holding and occupation in slack season, (109).

Weaving societies, 48,832.

CO-OPERATION:

Adult education, resolution of Provincial Co-operative Conference, (103).

All-India Bank, considered at Provincial Banks Conference, but not felt to be advantageous at present, 48,692, 48,695.
Banking unions preferable to banks of mixed type, 48,867-8.
Banks and branches, use of surplus balances of local subtreasuries by, proposal, (105), 48,673-91, 48,807-8, 48,921-4.
Bombay Provincial Bank, Ltd.:

Advances of money for debt redemption 48,729-7

Advances of money for debt redemption, 48,723-7.

Cash credit with Imperial Bank of India, 48,648. Cheque system and advantages of, 48,892-8.

Debentures, Government guarantee, 48,766-7, 48,871. Demand for long term credit not met by, to any extent, 48,697.

Financing of, 48,638-4.

Issue of further debentures under consideration, 48,644-5.

History of, 48,633-7. Lending to, and receipt of deposits from, other Provinces,

48,693-4.

Money lent only to registered societies and not to cultivators, and undesirability of lending direct to cultivators, 48,649-52. Opening of branches of, versus starting new local central banks, 48,867-9.

Relations with Agricultural Department, 48,784. Share capital, amount of, and amount held by individuals and by societies, 48,787-92.

Supply of sulphate of ammonia and iron implements by, working as agents on commission, (104), 48,660-6. Surplus, 48,686-90.

Central Banks, opening of, in rural areas, proposal for encouragement, (105), (112).

Co-ordination in work of credit and purchase and sale advocated,

(113), 48,818-21. Credit societies:

Limit on advances to individuals:

Change in form advocated under certain conditions, (113), 48,768-80.

Raising of limit, would not solve problem, 48,846-54.

Rs.300 inadequate and revision needed, 48,925-8.
for Short terms loans, the most suitable system, (104).
Debt redemption through, and proposal re, (108), 48,723-7, 48,815-21, 48,933.
Department, functions advocated for, (112).

Deposit banking, proposals for encouragement, (112). Education of borrowers, importance of, and steps taken in areas served by Bombay Provincial Bank, (104), 48,667-9.

Education of members in co-operative principles, payment of staff by Government would be agreed to, but through central representative body, 48,884, 48,887.

Education and propaganda, voluntary associations with State financial assistance, advocated, (111). Effect on moneylenders, (114).

MEHTA, V. L .- contd.

CO-OPERATION-contd.

Encouragement of growth of, proposed measures for: by Government, (104-5), (111-2), 48,672-95. by Non-official agencies, (112).

and pressing societies, technical control a difficulty,

Ginning s 48,752-5.

Implements, sale through, statistics and proposal, (109), 48,826-31. Increase in membership and business anticipated, 48,783. Instalment shares, proposed introduction of system in certain

districts, (112).

Issue of remittance transfer receipts direct from provincial headquarters to sub-treasuries and vice versa, advocated, (105), 48,672-3, 48,921-4.

Loans tatements of normal credits, system of, and extension advocated, (112), 48,773-4, 48,800-6, 48,862-6.

Official element, proposals for gradual decrease, 48,905-11.

Payment of loans by cheque, statistics, and desirability of extension.

sion, (112-3).

Primary societies with unlimited liability, provision of free audit by Government advocated until free and compulsory education introduced throughout the country, (111-2), 48,756-65, 48,881-8.

Provincial Co-operative Institute, recognition by Government advocated, as in Bombay, 48,855-6.

Purchase and sale societies, benefits derived from, (114).

Purchase and sale:

Combination desirable, (113).
Requirements for success and proposals, (114).
Rate of interest, opinion re, 48,929-30.

Results, (114). Sale of fertilisers through, and proposal re, (108-9)

Sale societies: 1921-1926, (113).

Advocated, (110), 48,750-1, 48,754. Cotton, 48,751.

Jaggery, 48,751.

Supply of cotton seed in Khandesh, statistics, 1923-26, (113). Taccavi advances through, system, (105-6), 48,700-22. Taluka development associations, constitution and work (103-4), 48,657-9.

Urban and central banks, audit, banks should be permitted to select own professional auditors, (112), 48,889-91.

Chors, change from food crops to money crops as cause of borrowing, (106), 48,734-43.

DEMONSTRATION AND PROPAGANDA:
Adoption of expert advice, means of inducing, (104), 48,798.
leading Agriculturists must be associated with propaganda work,

diffusion of Education necessary for spread of influence of, (103).

Taluka development associations registered under Co-operative Societies Act, constitution and work of, (103-104), 48,657-9.

EDUCATION:

Adult:

(103).

Co-operative movement should be associated with, 48,859-61, 48,935-6.

Night schools, endowment fund created by Sir Vithaldas Thakersey, but abandonment, (103), 48,653-6, 48,858-61, 48,899-902.

MEHTA, V. L.—contd.

EDUCATION—contd.
Adult—contd.

Punjab system, (103).

Agricultural schools of type of Model school put up at Poona Agricultural School, extension advocated, 48,793-7.

Danish Folk High Schools, institutions of type of, but more modest in aims, proposal, (115), 48,937.

Illiteracy, relapse into:

Means of proposating (115), 48,007

Means of preventing, (115), 48,937.
Tendency declining, (114-5), 48,781-2.
Primary, free and compulsory, importance of immediate and universal introduction, (114).
Rural bias advocated, (114-5).
Starting of sphele fragged partly by accounting hodies and State.

Starting of schools financed partly by co-operative bodies and State and local authorities, resolution of Provincial Co-operative Conference, (103).

FERTILISERS :

Co-operative organisation of sale of, proposal for, (108-9). Popularisation of, proposed means of, (108-9).

Sulphate of ammonia:

Sale of, through co-operative societies, statistics, (108-9).

Supply by Bombay Provincial Bank working as agents on commission, (104), 48,660-6.

FINANCE:

Cheque currency, increasing adoption of, 48,670-1. Land Mortgage Banks:

Government financial assistance, proposal, (105), (111), 48,870-2. Proposal, (105), (107-8), 48,696-9, 48,873-4, 48,931-2. Taccavi loans :

Continuance only necessary in certain areas, (105).

for Land Improvement:

through Co-operative Societies, system, (105-106), 48,700-22. Proposals for improvement of system, (106). Short-term, co-operative credit societies the best method, (104). Special machinery for rural credit, need for, (104).

Holdings, consolidation, Punjab system, generally agreed with, 48,912. Gur making, improvement needed and proposal for training classes, (111), 48,917-20.

IMPLEMENTS:

Iron, supply by Bombay Provincial Bank working as agents on commission, (104), 48,660-4.

Popularisation, proposed means of, (109). Sale through co-operative societies and proposal re, (109), 48,826-31.

in Areas liable to famines and scarcities, proposed financial assistance, (108), 48,811-4.
Field embankments for conservation of rain water, possibilities in

Sholapur, (108).

Minor schemes, obstacles to development of, financial and technical, (108), 48,913.

Tanks and ponds, districts where scope for, (108). Technical advice, proposal, (108). Wells, districts where scope for extension, (108).

MARKETING:

Co-operative societies advocated, (110), 48,750-1, 48,754. Cotton, co-operative sale societies, 48,751. Defects of present system, number of intermediaries, (110). Glutting of local markets at time of payment of land revenue, 48,877-80.

Gur, systems and suggestions for improvement, (111), 48,751. Information as to crop conditions, proposed means of, (111).

MEHTA, V. L .- contd.

MARKETING-contd.

Weights and measures, need for uniformity, (110-1).

WELFARE OF RURAL POPULATION:

Contracting margin between agricultural income and expenditure, (106), 48,728-32. Improvement of health conditions, means of inducing, (110).

Meteorological Department, see under Administration.

Middle-class youths:

Agricultural clubs for, proposal, Goheen (496), 51,703-4:
Lack of interest in agriculture, causes of, G. H. Desai (157); Devadhar
49,581-8; D. P. Desai (319-20); Kembhavi (462-3), 51,475.
Means of attracting, to agriculture, G. H. Desai (157); D. P. Desai
(319); Naik (337); Ransing (387); Kothawala (477), (487).
Training as apprentices, with stipend, at Government or private farms,
proposal Vail (337)

proposal, Naik (337).

Milk, see under Dairying industry under Animal Husbandry.

Millets, see under Crops.

Moneylenders, see under Agricultural Indebtedness.

Mortgages, see under Agricultural Indebtedness.

Muktesar Institute, see under Research under Veterinary.

NAGPURKAR, S. D., M.Ag., of the Union Agency, Poona (Manures): (366-374), 50,439-623.

ADMINISTRATION:

Meteorological Department:

Agricultural interests not attended to, (368).

Joshis of more service to farmers than, (368), 50,494-8.

whole-time Minister of Agriculture in Council, proposal, (368).

Political divisions unsuitable to agricultural conditions, and each agricultural Province should be complete unit, (367).

Railways: Export and import trade favoured as against agriculture, (368),

50,451-2.

Freights:

on Manures, reduction needed, (370). on Sulphate of ammonia, reduction advocated, 50,451-2.

AGRICULTURE a losing concern in the Deccan, 50,613-7.

AGRICULTURAL INDEBTEDNESS:

Relief of, only possible by making agriculture profitable, (369). Repayment, reasons preventing, (369).

AGRICULTURAL INDUSTRIES:

Carting a bye industry, but decline owing to introduction of railways and motor lorries, (372).

Investigation for improvement of implements, etc., desirable, (372).

Need for, 50,534-5.

Poultry keeping, suitability of, (372). Sheep and cattle rearing on small scale, suitability of, but Govern-

ment assistance with capital needed, (372).

Spinning and simple weaving the most suitable subsidiary cottage industry, (372), 50,532-6.

Time spent by cultivators on holdings and occupation during slack

season, (372). AGRICULTURAL LABOUR, land development schemes entailing migration of, must be undertaken by capitalists or Government, (372).

NAGPURKAR, S. D .- contd.

AGRICULTURAL SERVICE, not in tune with agriculturists, (367), 50,583-6.

ANIMAL HUSBANDRY:

Bulls, compulsory castration of bulls not required for breeding. advocated, (372).

Cattle breeding not profitable to cultivators owing to fodder difficulty, 50,543-55.

Dairy industry, not a farmers' industry, (372). Deterioration of cattle, (371), 50,547, 50,554.

Export of oil cakes and oil seeds, prevention advocated, (371). Increase of area under food crops advocated, (372).

Oilcakes, difficulty caused by export, 50,554.

Oils, bounties on production of, advocated, (371).

Preservation of grass lands and removal of vexatious restrictions of forest laws advocated, (372).

Grazing, in Deccan, position re, 50,546-53.

Improvement of breeds, proposed means, (371-2).

Number and quality of cattle, need for increase, (367), 50,480-5.

Selection and improvement of existing strains of draught and milch couttle proceded (371). cattle needed, (371).

Sheep rearing, need for encouragement, and proposal, (370).

no Desire by city men to purchase land in the Deccan, 50,573-7, 50,580-83, 50,620-2. Need for attracting, to agriculture, (373-4).

Co-operation:

Credit Societies, provision of funds by Government for long-term loans by, proposal, (368), 50,453-4.

Government provision of funds to be used by co-operative societies

for provision of capital, advocated, (373).

Damage by wild animals:

Arms Act should be made more liberal (371).

Decreasing, (371). Food crops should have preference over commercial crops, 50,623. Grain, annual yield, and comparison with requirements of population, (366), 50,465-79, 50,561-9.

Improvement in grain crops would result in improvement in fodder

supply, (371).

Improvement by selection and breeding of dry food crops, possi-

bility, (370).

Introduction of exotic varieties not advocated, (371).

Protection:

External, (371).

Internal, need for investigation, (371).

Selection and distribution a necessity, (371). Selection and preservation, need for propaganda in better methods, (371).

Sugarcane, use of sulphate of ammonia, (370), 50,512-7, 50,537-9. Yield, need for increase, (366).

Dry, problem of, and requirements, (366). Indian system of tillage, rotation and mixing, no improvement needed, • (371).

DEMONSTRATION:

on Cultivators' land, proposal for, (367). the only Practicable method of propaganda, (367).

Education:

of Adult farmers, none, (367).

NAGPURKAR, S. D .- contd.

EDUCATION-contd.

Agricultural:

Adult, need for, by oral instruction and on demonstration farms, advocated, 50,578-9.

Defects of present system, and requirements, (367), 50,450. Dhulia school, particulars re, (385), (388), 50,634-64, 50,728-9. Incentives to study, (367).

Poona College, training at:
Inadequacy of, on practical side, 50,450.
Opinion re, 50,556-60.
Compulsory, time not ripe for, (373).

FRETILISERS:

Adulteration:

no Adulteration by merchants, small amount possible by petty men, 50,588-96.

Legislation on lines of Fertilizers and Foodstuffs Act of England, advocated, (370), 50,587-94. Artificial, value of, (369-70). for Bajri:

Investigation of question and further experiments needed, 50.460-4.

not Profitable without sufficient rainfall, 50,460.

Bones, fish and oil cakes, prevention of export advocated, (370). Chemical:

Manufacture in India by most modern and cheapest methods advocated, (370).

Use of, risky for dry crops, 50,522.

Cowdung, use as fuel, means of prevention, (370), (373), 50,597.

for Dry crops, investigation needed, 50,455-7.

Effect of phosphates, &c., further investigation needed, (370). Farmyard, proposals for increased supply, (370).

Fisheries and fish oil manufacture, encouragement advocated, (370). Green manuring, encouragement advocated, (370).

Importance of question, (370). Natural:

Sheep 1 (370). rearing, need for encouragement and proposed means,

Value of, (369-70).

Night soil, poudrette, encouragement advocated, (370), 50,500-7. Oil cake, increased use of, 50,523.

Popularisation, proposed means of, (370). Railway freights, reduction needed, (370).

Sulphate of ammonia:

Experiments with, results and scope for increased use, 50,508-21. Use of, for sugarcane, (370), 50,512-7, 50,537-9.

FINANCE:

Investment of capital in business, proposal for encouraging, (368).

Peoples' Banks, proposal, (368).
Requirements, (368).
Taccavi loans, issue through Co-operative societies with direction of utilisation by Agricultural Department, advocated, (368).

FORESTS:

Afforestation, need for, (373).

Department:

should not be considered as Revenue-making department but as

department to help agriculture, (373).

Transfer to Minister of Agriculture proposed, (368), 50,597.

Fuel, free supply advocated, (373).

Grazing:

Discouragement by forest laws, (372). Facilitation of permits needed, (372). Fees, not excessive, (372), 50,598-603. Free, not advocated, 50,619.

NAGPURKAR, S. D.—contd.

FORESTS-contd.

Officers, change of attitude needed, 50,604-5.

Policy must be in favour of agriculturists, 50,597.

Sheep grazing, facilitation advocated, (370).

Holdings, consolidation by natural process taking place and will continue if left alone, (369).

IMPLEMENTS, indigenous, most suitable on the whole, modern machinery only desirable in case of land development schemes, (371), 50,486-93.

IMPROVEMENTS:

Factors discouraging landowners from carrying out, (374), 50,570.

Nature of, required, 50,571.

IRRIGATION: Canals, perennial, must be accompanied by drainage system, question of economies of, and need for investigation, (369).

Lift, with power-pumping machinery, advocated where deep basins exist, (369).

Retention of rain water, need for, and manure could then be used,

(369), 50,524-31.

Seasonal canals, ponds, tanks, embankments, bunds and wells better than perennial canals, (369).

Waterfinder, appointment by Government approved, 50,572.

Water-finding methods, investigation of underground streams advocated, (369).

MARKETING:

Facilities satisfactory, but systems of marketing and distribution not satisfactory, (373).

Grading, etc., not critical questions for small farmers, only for exporters, (373).

Weights and measures, uniformity advocated, (373).

RESEARCH, proposed lines of, (366-7).

Tariff, export duties on oil seeds and cakes advocated, (371).

Union Agency of Bombay and Poona, functions and work of, etc., (370), 50,441-9, 50,508-16, 50,537-42.

Indigenous methods should be studied and developed where necessary and taught in agricultural colleges, (367).

Indigenous science, suitability of, and need for revival and improvement, (371), 50,606-11.

Western science unsuited to Indian needs, (367), (371), 50,486-93.

WELFARE OF RURAL POPULATION:

Economic condition of farmers must be improved, (374).

Economic surveys advocated and proposal re carrying out, (374).

NAIK, Rao Bahadur BHIMBHAI R., President, District Local Board, Surat, and Member, Indian Central Cotton Committee: (337-341), 50,107-50,282.

Experience of, 50,111-3.

ADMINISTRATION:

Motor services, Surat district, 50,210-5. Postal facilities satisfactory on the whole, (338).

Railways:

Concessions to agricultural produce advocated, (338).

Rolling stock should be increased, (338).

Roads:

Bad condition, 50,204-9.

Improvement and increase necessary for marketing, (338). Steamship companies, agriculture should receive special concessions from, (338).

AGRICULTURAL DEPARTMENT, some good done by, but not as much as expected of it, (338).

NAIK Rac Bahadur BHIMBHAI R .- contd.

AGRICULTURAL INDEBTEDNESS:

Agricultural land banks, proposal, 50,249. Causes of, (338).

Credit:

Restriction not advocated, (338).

Sources of, (338).

Deccan Agriculturists' Relief Act, result, 50,271-6.

Emigration to British Colonies should be arranged for, (338).

Incurring of debt in order to pay Government dues, 50,249, 50,252-3, 50,265-7.

Insolvency Act, not desirable, (338).
Insolvency proceedings, objection to, 50,270-6.
Redemption of debt essential for agricultural improvement, 50,249.
Repayment, reasons preventing, (338).
Sourcars, assistance to agriculturists and to Government, 50,249.

Usurious Loans Act, not desirable, (338).

AGRICULTURAL INDUSTRIES:

Industrial concerns, removal to rural areas desirable, (340). Intensive study of rural industries advocated, (340). Obstacles in way of expansion, (340). Preparation of agricultural produce for consumption, Government should establish industries, (340).

Spinning and weaving suggested, (340). Time spent by cultivators on holdings, (339-40).

AGRICULTURAL LABOUR:

Attraction to areas where shortage, organisation of labour bureaux

and settlements advocated, (340).
Importation necessary, (340), 50,162-5.
Shortage owing to expansion of railways and urban industries, (340).

Animal Husbandry:

Dairying industry, betterment necessary, (339).

Fodder:

Common pasture, increase advocated, (339).

Common pasture, increase advocated Conditions in district, (339). Shortage, periods of, (339). Improvement of breeds, necessary (339). Improvement of practice needed, (339).

Increasing interest of landowners, propaganda and demonstration advocated, (339).

CAPITAL, reasons for men with capital not taking up agriculture, (340).

Credit Societies, assistance advocated, (338).

Government should subsidise movement and do more propaganda, (340).

Joint improvement schemes, compulsion not advocated, (340).

Results, (340).
Societies of all kinds useful and should be encouraged, (340). Sousak Cotton Sale Society, 50,174.

CROPS:

Cotton:

Improved seeds, profit to cultivator from, 50,191-7.

Yield decreasing, 50,149.

Damage by wild animals and stray cattle, and recommendations by committee on prevention of, should be given effect to, (339). Dry, growing of, in Gujarat owing to obstacles to extension of irrigation, 50,233-4.

Improvement:

Means of, (339).

Sowing wider apart and ridge cultivation taken up, (339).

NAIK, Rao Bahadur BHIMBHAI R.—contd. DEMONSTRATION AND PROPAGANDA: Demonstration farms and demonstration on cultivators' plots, useful, (338). Experts must prove their usefulness, (338). Field demonstrations, means of increasing effectiveness, (338). Leaflets, magic lantern lectures or cinematographs advocated, (338). Staff, increase needed, (338). DISTRICT LOCAL BOARDS: Surat: Funds, inadequacy of, 50,114-7. Management of education not yet taken over owing to lack of funds, 50,128-31. Subjects in which interested, 50,118-21. Taxable resources, further development not possible, 50,116-7, 50,127. EDUCATION: Administration by Local Boards advocated, (337). Adult night schools, proposal, (337). Agricultural: Attendances, applications in excess of vacancies, (337). Facilities, need for increase, (337). Graduates, preference for Government service advocated, (337). Incentives to study of agriculture, (337). Institutions and teachers, insufficiency of, (337). Students: After careers, (337). Source of, (337). Technical knowledge, no steps known of, for improvement, Teachers in rural areas should be drawn from agricultural classes as far as possible, (337). Vocational schools, (340). Agricultural bias in secondary and elementary education advocated, Continuation classes advocated, (340). Financing of, by Government advocated, (337). Nature study, importance of, (337). Primary, reason for small proportion passing through fourth class, Provision of cheap agricultural literature advocated, (340). School farms, importance of, (337). School plots, importance of, (337). Secondary Schools, agricultural plots advocated, (337). FERTILISERS: Artificial, too costly for dry crops, (339). Cowdung, use as fuel, means of preventing, (339). Green manure: Extended use of, advocated, (339). Sann, becoming popular in certain talukas, (339). Natural: Advantages of as compared with artificial, (339). Insufficient, (339). Popularisation of, through demonstration farms advocated, (339). FINANCE: Long term credit, Government should supply, (338). Rural agricultural banks advocated, (338). Taccavi loans: Distribution quickly and by highly placed responsible officer advocated, (338). Lowest possible rate advocated, (338).

Firewood and fodder, utilisation of more waste lands for growing

no Deterioration from excessive grazing, (340).

of, advocated, (340).

FORESTS .

NAIK. Rao Bahadur BHIMBHAI R .- contd.

FORESTS-contd.

Forest areas should be left open to grazing as far as possible, (340).

Consolidation, obstacles in way of, (338).

Co-operative cultivation:

Co-operative cultivation:
Kosad, experiment, 50,198-9.
Proposal, (338), 50,198-203.
Economic holding for husband, wife and two children, 50,249.
Fragmentation, excessive, should be checked, but sub-division to certain extent must be allowed, (338).
Village disputes, village panchayat should be empowered to deal with, (338).

IMPLEMENTS:

Adoption, means of hastening, demonstration and propaganda, (339).

Improvement, scope for, (339), Improved iron ploughs not very successful, (339).

IMPROVEMENTS, factors discouraging landowners from carrying out, (340).

Indian Central Cotton Committee:
Constituton, election suggested instead of nomination, 50,136-7.
Good work being done by, 50,132-4.

Representation of growers on, 50,138-45.

IRRIGATION:

Gujarat:

Expenditure on, inadequacy of, compared with work in Deccan and Sind, and proposal, (339), 50,230-2, 50,244.

Wells, in Gujarat, decrease owing to sub-soil water tax, 50,233-4.

LAND:

Inamdari system, 50,153-7, 50,185-90, 50,216-8, 50,235-43. Ryotwari system, 50,183-4.

System, need for change, 50,181-2.

System in South Africa and India, comparison, 50,219-29.

LAND REVENUE:

Assessment:

High rate of, 50,249-69.

Highness of, a h agriculture, (340). hindrance to men of capital taking up

Periodical, factor discouraging carrying out of improvements, (340).

Prices of abnormal years taken by Government in fixing, 50,270-81.

closer Co-ordination with agriculture needed, (338).

Inamdari system, 50,153-7, 50,185-90, 50,216-8, 50,235-43.

Percentage of net rents taken by Government, 50,249, 50,250.

System, taking up of agriculture by men of capital hindered by, (340).

MARKETING:

Cotton:

Co-operative sale societies, increase advocated, 50,246. Separate cotton markets, need for, in district doubted, 50,246-7. System, Surat district, 50,166-74.

Information to cultivator, etc., re market conditions, etc., advocated, (340).

Merchants, margin of profit, (340).

Surat district, (340).

Transport facilities inadequate, (340).

Unsatisfactory arrangements, (340).

NAIK, Rao Bahadur BHIMBHAI R .- contd.

MIDDLE CLASS YOUTHS:

Means of attracting, to agriculture, (337). Training as apprentices, with stipend, at Government or private farms, proposal, (337).

SEA FREIGHTS, should be favourable to exports from Europe, (340).

Soil, fertility decreasing and reasons, 50,146-53.

STATISTICS, non-official representatives of the people should co-operate with Government agencies, (341).

Tariffs, protective duties on imported agricultural produce competing with local article, advocated, (340), 50,175-80.

Civil Veterinary Department, control by Director of Agriculture advocated, (339). Contagious diseases:

Legislation desirable after education of popular opinion, (339). Obstacles in way of dealing with, (339).

Dispensaries:

Expansion not adequate owing to want of funds, (339). under Local District Boards and working well, (339). Touring, insufficient, (339).

Transfer to Provincial authorities advocated, (339).

full Use made of, (339).

Local drugs used by cultivators, research advocated, (339).

Preventive inoculation, fees undesirable, (339). Research, further facilities advocated, (339).

Service, some good done by, but not as much as expected of it, (338).

Wages, increase, 50,282.

WELFARE OF RURAL POPULATION:

Agriculturists illiterate, poor and helpless, (341). Economic surveys of typical villages, advocated, with majority of non-officials on investigating committee, (341).

Improvement of health conditions, education and propaganda

advocated, (340).

Improvement, means of, (341).

Nature study, see under Education.

Oats, see under Crops.

Oil pressing industry: By-product industry of making paints and varnishes, question of prospects, Kembhavi 51,505-11.

Embargo or duty on exportation of oilseeds desired, Kembhavi 51,490-3.

Failure of mills, probable reason, Kembhavi 51,495-8. Chanis, question of possibility of improvement, Kembhavi 51,550-7.

Government assistance, little scope for, Kembhavi 51,499-500. Gujarat, G. H. Desai (187). Import duty not desired, Kembhavi 51,494. Oil cake, disposal of, Kembhavi 51,531-43.

Particulars re, Kembhavi 51,417-61.
Rotary mill, experimental putting up of proposed by Government but success doubted, Kembhavi 51,501-4.

not Suitable for cultivators, Kembhavi 51,546-9.

Oilcakes:

EXPORT:

Difficulties caused by, and prevention advocated, Nagpurkar (370), (371), 50,554.

Duty advocated, D. P. Desai (316).

Increase anticipated, Calvocoressi 50,963-4.

Oilcakes-contd.

EXPORT-contd.

Restriction:

probable Effect, Fotiadi 50,965.
Objected to, as an exporter, Fotiadi 50,967-9.
Oil contents, question of, Fotiadi 50,972-3.

Bounties on production of oil advocated, Nagpurkar (371). Disappearance of certain varieties from the market, Calvocoressi

Export, prevention advocated, Nagpurkar (371). Foreign competition, Calvocoressi 50,985-6.

Question of exporting oil instead of seed, Calvocoressi 50,979-82. Til seed, displacement by groundnut, Kembhavi 51,431-3.

PECK, Major, representing the Salvation Army Social Work: (274-276), 49,607-49,696.

AGRICULTURAL INDEBTEDNESS: Causes of, (275).

Credit:

Restriction advocated, (275). Sources of, (275).

Moneylenders, enforcement of law prohibiting exorbitant interest, advocated, (275).

Mortgage and sale, restriction of right advocated, (275). Repayment, reasons preventing, (275).

AGRICULTURAL INDUSTRIES: Hand-loom weaving and spinning on co-operative basis, proposal,

(276), 49,647-9, 49,678-96.

Importance of encouraging, 49,689-90.
Organisation under central control of village authority advocated, (276), 49,660.

Proposals, (276). Time spent by cultivators on holdings and occupations during slack

season, (276).
Weaving, Government inspectors, good done by, 49,692-4.

AGRICULTURAL LABOUR, attraction to parts where shortage or to uncultivated land, proposed means of, (276), 49,616-7, 49,675-7.

CO-OPERATION:

Agricultural machinery, use of, societies desirable, (276). Consolidation societies, desirable, (276). Credit Societies, need for, (276).

Necessary for improvement of agricultural conditions, (276). Sale societies, need for, (276). Wells, protection against flood, trespasses, etc., need for societies for, (276).

DEMONSTRATION AND PROPAGANDA, model farms within reach of cultivators, proposal, (275).

DEPRESSED CLASSES: Character below level of others, 49,640.

no Co-operative societies known of, and failure of experiment, 49,636-7, 49,665-6.

Education, Salvation Army work, 49,609-11, 49,618-9, 49,661-2. Intelligence and psychology of, 49,633-5. in Salvation Army industrial school, little interest in agriculture,

(274).

Uplift of, attitude of other classes to, 49,638-9, 49,644-6. FINANCING of separate village communities under management of village panch, proposal, (275).

HOLDINGS: Consolidation, obstacles in way of, (275).

Minor disputes should be settled out of Court, (275).

Standard of cultivation, legal insistence on, proposal, (275).

PECK, Major-contd.

IMPLEMENTS:

Hiring out of, from model farms, proposal, (276). Introduction, model farms would help by practical demonstrations.

IRRIGATION, scarcity of water in certain districts, and wells advocated. (275).

LIQUOR AND DRUGS, consumption believed to be increasing and attitude of Salvation Army re, 49,651-5, 49,667-74.

MARKETING, Co-operative marketing necessary, (276).
PUBLIC HEALTH, drinking water, shortage of, for lower classes (275), (276).

SALVATION ARMY:

Attitude in villages as regards work of, 49,641-6.

Farm colony, 49,656-9.

Nature of work, finance, etc., 49,623-6, 49,650, 49,663-4. Workers, number, training, etc., 49,627-32.

SEEDS, distribution under management of local governing bodies supplied from a centre, proposal, (276).

WELFARE OF RURAL POPULATION:

Condition of poorer classes, (276). Improvement of conditions, general desire for, 49,618-20.

Pisciculture, see under Agricultural Industry.

Posts, see under Administration.

Potatoes, see under Crops.

Poultry rearing, see under Agricultural Industries.

Propaganda, see Demonstration and Propaganda.

Public Health:

DRINKING WATER:

Provision of good supply advocated, Bhagwat (447).
Shortage of, in some districts for lower classes, Peck (275), (276).
Village First Aiders, system of, and extension advocated, Devadhar (242), 49,361-2.

Pusa Institute, see under Research.

Railways, see under Administration.

Ralli Brothers:

Business, nature of, Calvocoressi, 50,806, 50,954. Cotton, purchase methods, Fotiadi 50,807-13, 50,856-7. Evidence on behalf of, see Calvocoressi, Stephen, and Fotiadi, A., 50,805-50,986. no Expert knowledge of cultivation, Calvocoressi 50,917-21, 50,939-42. Wheat, purchase methods, Calvocoressi 50,858-60.

RANSING, B. R., B.A., LL.B., Hon. Secretary, Dhulia Taluka Agricultural Association and Member of Divisional Board of Agriculture, North Central Division, Bombay: (385-391), 50,624-50,804.

AGRICULTURAL INDESTEDNESS, redemption of debts:
Operations of Nagpur Ideal Insurance Company, 50,725-7. Steps being taken for, in Khandesh, 50,724.

RANSING, B. R.—contd.

AGRICULTURAL INDUSTRIES, hand spinning and hand weaving, proposal, 50,787-97.

ANIMAL HUSBANDRY:

Decrease in cattle, Khandesh district, 50,680-3. Price of cattle, increase since war, 50,682-6.

CO-OPERATION

Bombay Central Co-operative Institute, lecture tour with lantern

slides and success of, (390).
Cotton sale societies, East Khandesh, wound up, 50,782.
Supervision of societies by Taluka Development Associations advocated, 50,712.

CROPS:

Bajra, introduction of new variety into Khandesh district, (387). Cotton:

Cotton:
Castor cake as manure for, in Khandesh district, (389).
Neglectum roseum, introduction into Khandesh district by
Taluka Agricultural Association, (388).
Ground nuts, foreign, introduction into Khandesh district by Taluka
Agricultural Association, (388), (389).
Lucerne, introduction of, from Gujarat by Dhulia Taluka Agricultural Association, (388).
Sundia juar, introduction of, from Gujarat by Dhulia Taluka
Agricultural Association, (388).

DEMONSTRATION AND PROPAGANDA:

Adoption of expert advice by cultivators, means of hastening, (389). Agricultural Associations:

Carrying out of rural welfare work by, should be possible if Government subsidies, proposal, (389), 50,704-5, 50,754-6. the best Medium for, (389).

Supervision of co-operative societies by, advocated, 50,712. Supply of information re market conditions to, advocated, (391). Social work, and village reconstruction schemes would be approved, 50,763-7.

Unit for, question of, (389), 50,760. Workers, difficulty of obtaining, 50,699-702.

on Cultivators' fields:

Advantages of, (388).
Cultivators should be guaranteed against loss and a minimum income from land used for, (389), 50,671-5, 50,679, 50,746-8.
Demonstration farms, cultivators timid of taking up improvements

shown on, (388).
Dhulia Taluka Agricultural Association:

Particulars re work of, &c., (387-8), (389), 50,699-706, 50,710-2, 50,715-20, 50,730-9, 50,754-9, 50,771, 50,776.

Rural welfare work, possibility of undertaking, with Government financial assistance, 50,707-9. Field demonstrations:

Economic survey of taluka needed first, (388), 50,749-53. Effectiveness of, hampering of, reasons and proposals for in-

creasing, (388-9).

Magic-lantern lectures and cinemas useful, (389-90). Rewards to cultivators doing propaganda work, proposal, (389).

Success, examples of, 387), (389).

EDUCATION: Adult:

Popularisation, proposed means of, (387). in the Punjab, success of, (387).

RANSING, B. R .- contd.

EDUCATION-contd.

Agricultural:

Attendances, inadequacy of, and means of increasing, (386).

Facilities, need for increase, (386). Poona College Students:

not Fitted to be managers of big estates and proposal re

further training, (387), 50,743-5.

Jalgaon farm training scheme and failure of, (387), 50,740-3. Proposals, (385-6).

Schools:

in every District, and Government financial support advo-cated, (385-6).

English education needed, 50,657-8. Students, after careers, (385), (386-7), 50,650, 50,656. Supply of institutions and teachers insufficient, (386).

Teachers:

Training of, at Dhulia Agricultural School, proposal, (386). Limitation of recruitment to agricultural classes, undesirable, (386), 50,713-4.

Agricultural bias schools and proposal re, (386).

Illiteracy, lapse into, proposed means for preventing, (387).

growing, oranges and lemons, Khandesh district, (388), FRUIT 50,665-70.

New, introduction through Dhulia Taluka Agricultural Association, (388).

Tractors, Government asked for, but nothing done, Khandesh district, 50,798-9.

IRRIGATION:

Conservation of water, importance of, 50,779. Water diviners, 50,801-4.

Managers for estates of, need for, and proposals re training, (387), 50,743-5.

MARKETING:

Cotton:

Dalals, reason for cultivators preferring to sell to, 50,783-6. Dhulia market:

Particulars re, and system in, (390-1), 50,693. Regulation, proposal for, (391), 50,687-90, 50,694-7.

Regulation of markets and appointment of market committees, proposal, (391), 50,687-90, 50,694-7.

Information to cultivators etc. re market conditions, proposal, (391). Markets should be within Municipal boundary, 50,692-3.

MIDDLE CLASS YOUTHS, proposed means of attracting to agriculture, (387).

Rate of exchange, 18d., objections to, Kothawala (489); Walchand Hirachand 51,849, 51,941-7.

Advisory Council, proposal for, Burt (48), 48,512-8.
Central, advantage of, shown by Pusa work on wheat, Burt 48,383-6.
Central Government, proposed functions of, Burt (46).
Central Institute might be maintained by Central Government under control of advisory body on which all Provinces represented, Bhagwat (435).

Central organisation for distribution of grants and establishment of new research institutes, proposal, Burt (48), 48,515. more Centres should be opened in various localities, Bhagwat, (432), (435),

51,223. Conferences between officers of different provinces useful, Kembhavi (463)

Control by Local Councils advocated, D. P. Desai (314), 49,993-8.

Research-contd.

Co-ordinating agency, should be financed by Central Government, G. H. Desai (155).
Co-ordination, need for, and proposed means, G. H. Desai (158-9).

Cotton, see that title.

Crops and diseases in Gujarat needing investigation, G. H. Desai (155).

Experts, proposals and scheme for carrying out, Kembhavi (460-1). Experts, pooling of services, desirable, Kembhavi (463). Extension of, scope for, Indian Merchants' Chamber, Bombay (510); Walchand Hirachand 51,796-7.

FINANCING OF:

Central revenue must bear share of, Burt (43).

Export cess on wheat, question of attitude of Indian Merchants' Chamber, J.K. Mehta 52,096-8.

Definite research fund free from vagaries of annual budgets, needed, and proposal, Burt (48), 48,432-3, 48,437, 48,510-11, 48,526-8.

Grants by Central Government to provincial institutions, proposal, Burt (47).

Jute, from cess might be justifiable, Burt 48,508-9. by Provincial revenues advocated, G. H. Desai (155).
Tax on agriculture would not be objected to personally, Walchand Hirachand 52,004-8.

into Indigenous methods necessary, G. H. Desai (154). into Indigenous theory and traditional methods advocated, D. P. Desai

Indore Institute of Plant Industry, system of management, etc., Burt (48), 48,354-6, 48,521-5.

additional Institutes financed and maintained by Government of India, proposal, Burt (47), (48), 48,521-8.

Institutions and staff of experts, maintenance by Government of India,

Devadhar (223). Interchange of results between provinces advocated, Sir L. S. Mehta

Lack of continuity and settled policy, D. P. Desai (312). Lines of work necessary, G. H. Desai (154-5); D. P. Desai (312), (313); Nagpurkar (366-7); Bhagwat (432), 51,204-6, 51,328-46; Kothawala (476); Goheen (495), 51,723-7.

ORGANISATION BY CROPS on lines of Indian Central Cotton Committee:

ANISATION BY CROPS on lines of Indian Central Cotton Committee: Bajra, proposal, Burt 48,447, 48,456-7.

Crops for which organisation might be suitable, Burt 48,372-81.

Juar, proposed organisation, Burt 48,438-47, 48,456-7, 48,485-6.

not Necessary in case of crops where no particular trade interest, Burt 48,456-7, 48,507.

Possibility, Fotiadi 50,846-8; Calvocoressi 50,849-51.

Preliminary recommissions mod for Burt (46), 48,269, 49, 271

Preliminary reconnaisance, need for, Burt (46), 48,362, 48,371. Proposals, Burt (42-3); Indian Merchants' Chamber, Bombay (510-1); Walchand Hirachand 51,788-95.

Wheat, possibility of, and proposal, Burt 48,363-70. Plant-nutrition problems, need for increased work on, Burt (43), 48,495. Popular beliefs should be collected and investigated, G. H. Desai (154), 49,163-9, 49,071.

by Provinces, duplication not in itself a disadvantage, apart from financial point of view, Burt (42), 48,353.
Provincial Expert Staff, need for, G. H. Desai (159).
Provincial Governments should be encouraged and assisted to carry on,

Devadhar (223).

Provincial organisation advocated, Bhagwat (435).

Provincial organisation with financial assistance from Central Government advocated, D. P. Desai (313-4), 49,993-8.

Provincial and regional basis advocated, G. H. Desai (154), (155).

Provincial research programme, need for, for local crops, G. H. Desai

(176).

PUSA INSTITUTE:
full Advantage not taken of work of, by provinces, Burt (48),
48,501.

Research—contd.

PUSA INSTITUTE—contd.

closer Relations between Imperial staff and provincial workers desirable, Burt (48).

Value of, to provinces, Burt (47-8), 48,382-6.

Separation of function of experiment and research from that of demonstration, desirable, G. H. Desai 49,036.

Soil problems, need for increased work on, and proposal for strong soil science section at Pusa, Burt (43), 48,495-6.

Technique of field experiments increased study needed Burt (44)

Technique of field experiments, increased study needed, Burt (44), 48,497-8.

Three experts working in co-ordination for each study advocated,

D. P. Desai (312).

Tobacco experimental farms, D. P. Desai 49,938, 49,951-2.
Trained investigators, need for provision of cadre of, Indian Central Cotton Committee (31).

in U.S.A., Burt (46).
U.S.A. federal system not advocated for India, Burt 48,513-4.
Veterinary, see that title.

Workers, short-term agreement system, opinion re, Burt 48,469-73.

Revenue, see Excise Revenue and Land Revenue.

Rice, see under Crops.

Roads, see under Administration.

Rome, International Institute of Agriculture at, see that title.

Salvation Army:

Attitude in villages as regards work of, Peck 49,641-6.
Evidence on behalf of, see Peck, Major, (274-276), 49,607-49,696.
Farm colony, Peck 49,662, 49,656-9.
Nature of work, finance, etc., Peck 49,623-6, 49,650, 49,663-4.
Workers, number, training, etc., Peck 49,627-32.

See Freights, should be favourable to exports from Europe, Naik (340). Seeds, see under Crops.

Sericulture, see under Agricultural Industries.

Sheep breeding, see under Animal Husbandry.

SHIRHATTI, Rao Sahib G. S., Managing Director, Hubli Co-operative Cotton Sale Society, Ltd.: (283-297), 49,697-49,926.

Administration:

Railways:

traffic, suggestions for improvement (293), 49,860-2, Cotton 49,891-8.

Piltering and damage, (293).

Roads, village, improvement round Hubli, by District Board by grant of 2 per cent. from municipal cess on cotton, question of, (293), 49,863-6.

CO-OPERATION:

Oredit Societies:

Development scheme, (289-90). proposed Functions, (289). Loans, procedure of obtaining, (289).

Management, proposal, (289).

Maximum credit should be fixed on assets of individual member,

Maximum credit should be fixed on assets of instruction, (239-90), 49,789.

Sale of all produce through sale societies should be condition of loan, (290).

Staff, proposal, (290).

Sale Societies:

See also under Marketing below.

Constraint with credit societies, proposals for, (290).

Co-operation with credit societies, proposals for, (290).
Financing of members by, in areas without credit facilities, proposal, (290).

SHIRHATTI, Rao Sahib G. S.—contd.

Co-operation-contd.

Sale Societies-contd.

Sale of produce through, should be condition to receiving loan from credit societies, (290).

Separate societies dealing in particular commodities, for example, seeds, implements, manures, etc., not advisable, (290).

Seed depots, proposal, (291).

COTTON:

Cleaner picking, importance of, steps taken but difficulties, (285), (294), 49,812-21, 49,858-9.

Financing of:

by Co-operative credit societies, need for, and scheme, (289). further Credit required by cultivators, 49,789-96.

Methods, (288-9).

Ginning and pressing factories:

Combination into pools and drawbacks of, (295).

Running of, by co-operative sale societies, proposal, (295-6), 49.797.

Pests and diseases:

Investigation and scientific measures for removal advocated, (294).

Strains resistant to, introduction desirable, (294).
Seed multiplication farms needed, and proposal, (294-5).
Southern Maratha country, types grown, system of cultivation, etc., (283-5).

MARKETING:

Bulletin in Kanarese, proposal, (296).

Co-operative organisations: Advantages of, (292).

Propaganda, proposals, (291-2).

Cotton:

Co-operative:

Aim of, and advantages, (286-8), (296-7), 49,782-8. Collecting centres, scheme, (290-1).

Gadag Sale Society:

Boycotting of, by dalals, etc., 49,762-79.
Method of work, membership, etc., 49,766-79.
Hubli Co-operative Cotton Sale Society:

Committee of Management, 49,698-705. Improvement, suggestions for, (292-3).

Method of working profits, etc., (292-6, 49,821-56, 49,869-83, 49,897-901, 49,906. Sale of seeds, 49,724-8, 49,782-7. etc., (292-3), 49,706-61.

Karnatak Co-operative Central Cotton sale organisation, scheme for, (296).

Larger area of operation needed, (292).

Need for, (286). Obstacles to progress of movement, (288), 49,789-96.

Societies should also sell other agricultural produce, (291). Information re Bombay, etc., prices, system, Hubli, 49,856-7. Organisation of markets as in Berar advocated, (294). Sale of crop before picking, (285), 49,780.

Southern Maratha country, names of market places and statistics of quantities and values, (285).

Storage arrangements, 49,900-1, 49,906.
System, (285-6), 49,807, 49,809.
Weights and measures, and standardisation advocated (293),

49,805-6, 49,808.
Facilities and system not satisfactory, (263)
Improvement, proposals for, (296).
Information re weather and crop reports, season reports and forecast reports, publication in English, proposal, (296).

SHIRHATTI, Rao Sahib G. S .- contd.

MARKETING-contd.

Market committees, need for whole-time man, as work much neglected at present, (293).

STATISTICS, area under cotton and estimated yields, earlier publication of information advocated, (294).

Sind:

Agricultural College, need for, and proposal re, Mann 48,566, 48,599,

Cotton research scheme and grant, Indian Central Cotton Committee (10), (39); Monn 48,576. increasing Demand for research, demonstration and education, Mann

48,567-9.

Development in, policy of Government and Legislative Council re, Mann 48,549-50.

Sukkur Barrage, see under Irrigation.

Soils:

ALKALI:

Investigation of question by experts advocated, D. P. Desai (316). Reclamation, difficulties, G. H. Desai (174).

BUNDING:

of Dry lands, extension advocated and proposed means of encour-

of Dry lands, extension advocated and proposed means of encoraging, Bhagwat (438).

of Fields, Baroda, G. H. Desai 49,128-30.

Need for, in Bijapur district and co-operative system the best agency, Gordon 51,064-5, 51,095, 51,170-5.

Deterioration, example of, Kothawala (480).

DRAINAGE:

Disservice, possibility of, G. H. Desai (174). Improvement from, G. H. Desai (174).

Need for, in certain parts, Kothavala (480).
in Nira Canal tracts, Bhagwat (438).
Erection of dams near creeks, possibility of protection of land from erosion by influx of salt water, and proposals for encouragement, Devadhar (229).

Erosion:

Attention, need for, G. H. Desai (174).

Construction of drains advocated, D. P. Desai (316).

Erosion by flood water, prevention possible by construction of kutcha bunds, Kothawala (480).

Fertility decreasing and reasons, Naik 50,146-53.

IMPROVEMENT:

Example of, Kothawala (480). Proposals, G. H. Desai (174); D. P. Desai 50,102.

Physical improvement, difficulty, G. H. Desai (174).
Problems, need for increased work on, and proposal for strong soil section at Pusa, Burt (43), 48,495-6.

Productive capacity, deterioration, Devadhar 49,375-6.
Reclamation, Government must undertake, private enterprise not possible, D. P. Desai (316).

Reclamation of cultivable lands gone out of cultivation, measures required, (A. H. Desai (175). Research schemes under Indian Central Cotton Committee, Burt

Survey advocated, D. P. Desai (316).

WATERLOGGED:

48,533-8

Drainage, proposal, D. P. Desai (316), 50,102. Research, need for, and question of organisation, Burt 48,361.

South Daskroi Taluka Development Association, Ahmedabad, evidence on behalf of, see Kothawala, Nariman K., (486-9), 51,575-51,680.

Spinning, see under Agricultural Industries.

Statistics:

Annawari estimate, should be made on standard fixed by Government,

Kothawala (485).

Areas under cultivation and crops, not satisfactory and proposal, Kothawala (485).

AREAS AND YIELDS:

Annual figures good, but difficulties in connection with, Burt (56).

Compulsory supply of, not advocated, voluntary measures preferable,

D. P. Desai (321).

Improvement, scope for, Burt (54).

earlier Publication of information advocated, Shirhatti (294).

Census, every five years, advocated, Kothawala (485). Collection by leading agriculturists in co-operation with officials of

Revenue and Agricultural Departments advocated, Kothawala (489).

COTTON:

Crop forecasts: All-India, discontinuance of publication of leaflets, Burt 48,264. Publication of leaflets in the vernacular not considered necessary, Burt 48,261-3.

Defects, Indian Central Cotton Committee (33).
Estimates of production and statistics of consumption and discrepancies between, 1907-1926, Burt (54, 55, 56).
Evidence of Indian Central Cotton Committee agreed with, Burt

(54).

Improvement, recommendations re, Indian Central Cotton Committee (33).

Particulars re, Indian Central Cotton Committee (32-3). System, Indian Central Cotton Committee (6).

CROP CUTTING EXPERIMENTS:

Increased staff and money needed, Burt (56).

Requirements for success, Burt (56)

Crop forecasts, scope for improvement, Burt (54). Crop returns, collection by village officials, suggestion for improvement, Devadhar 49,539.

Cultivation and crops, variation in accuracy, Gordon (418). Decennial census, more detail with regard to caste by districts, proposal, Gordon (418).

Distinction between information for use of commercial community and permanent statistics forming basis of information, need for keeping

in mind, Indian Central Cotton Committee (34). Economic survey of rural population advocated, Kothawala (486).

ESTIMATES OF CROPS AND YIELDS:

Difficulties and proposals, Gordon (418).

Earlier information desirable, Calvocoressi 50,926-7.

not Satisfactory and proposal, Kothawala (485).

Seasonal condition factor, difficulty of, Burt (56), 48,429-30. not very Satisfactory and should be arrived at by Revenue Depart-

ment in consultation with Agricultural Department, Bhagwat (447).Standard outturn, practice re, Burt (56), 48,430-1.

Estimates of production and statistics of consumption, discrepancies between, Burt (54-56).

Financing of work by Central Government, proposal, Burt (57).

Influencing of area sown in following season, possibility doubted, Burt 48,547-8.

Interpretation of primary condition reports, increased staff needed, Burt (56).

Statistics—contd.

Land tenure, improvement advocated, Gordon (418-9). Literature should be in vernacular, G. H. Desai (196). Livestock and implements, satisfactory, Gordon (418).

Non-official representatives of the people should co-operate with Government agencies, Naik (341). not Published in convenient and handy form and difficulty of public

in obtaining, Kothawala (486).

RAIL-BORNE TRADE: Indian Central Cotton Committee (33), (34).

Re-established for cotton, and full re-establishment desirable, Burt

Recommendations of Board of Agriculture, 1924, supported, Burt (54). Unreliability of, G. H. Desai (196).

Steamship Companies, see under Administration.

Sugar Bureau, useful work done by, Indian Merchants' Chamber, Bombay (510).

Sugar industry:

Gur

Gur:
Improvement in manufacture needed, and proposal, V. L. Mehta (111), 48,917-20; Burt 48,381.
Organisation on lines of Indian Central Cotton Committee proposed, Walchand Hirachand 51,793-5.
Sugar making, Gujarat, G. H. Desai (187).
Manufacturing methods, improvement advocated, Burt 48,381.
Rab, improved methods of manufacturing, needed, Burt 48,381.

Sugarcane, see under Crops.

Sukkur Barrage, see under Irrigation.

Taccavi loans, see under Finance.

Tariff:

Export duty:

not Advocated, Walchand Hirachand 52,008. on Agricultural produce, none except on rice from Rangoon, G. H. Desai (190).

on Bones and oil cakes advocated, G. H. Desai (190); D. P. Desai (314), (316). on Foodstuffs in Indian States, G. H. Desai (190), 49,095-7. on Oil seeds, not advocated, disadvantages of, G. H. Desai (190). on Oil seeds and cakes advocated, Nagpurkar (371).

on Wheat, would be disastrous, Calvocoressi 50,957-8.

Agricultural machinery free of duty, G. H. Desai (189-90). on Implements, remission advocated, Goheen (500). on Iron, reduction would encourage manufacture of implements, Devadhar (230).

on Motor cars, abolition advocated, Bhagwat 51,278-9.

on Poultry industry appliances, remission advocated, Goheen (500). Protective duties on imported agricultural produce competing with local article, advocated, Naik (340), 50,175-80. on Steel, remission to agricultural implement makers, proposal, Kirloskar Brothers (352); Gurjar 50,288-96, 50,382-95.

Raw materials imported by agricultural implement makers, exemption advocated, Kirloskar Brothers (352).

no Special complaint, G. H. Desai (189-90).

Telegraphs, see under Administration.

Telephones, see under Administration.

Tobacco, see under Crops.

Union Agency of Bombay and Poona:

Functions and work of, etc., Nagpurkar 50,441-9. Work of, Nagpurkar (370), 50,508-16, 50,537-42.

Usurious Loans Act, see under Agricultural Indebtedness.

Veterinary:

CIVIL VETERINARY DEPARTMENT: Control by Agricultural Department advocated, Kothawala (482).

Control by Director of Agriculture:

Advocated, G. H. Desai (181); D. P. Desai (317); Naik (339).

would not be Objected to, Bhagwat (439).

would not be Objected to, Bragwar (439).
Control by Director of Agriculture belonging to Indian Agricultural Service, objection to, Kembhavi (466).

no Co-operation between Agricultural Departments and, D. P. Desai (317).
greater Co-operation with Co-operative Department, need for, Devadhar (223), 49,323.
District reports should be issued by, Gordon (416).

closer Touch with Revenue Department advocated, Gordon (416), should be Independent unless under administrative officers belonging to I.C.S., Kembhavi (466).

CONTAGIOUS DISEASES:

Common action between Indian States and British India as regards prevention of spread of, question of, G. H. Desai 49,066-70.

Education of cultivators advocated, Astrawala (488). Legislation:

Advocated, Kembhavi (467).

only Advocated after propaganda, Bhagwat (440).
not Advocated, at present, D. P. Desai (317), 50,004-5.
Desirable after education of popular opinion, Naik (339).
would be Unpopular at present, and education advocated, G. H.

Would be Capopala.

Desai (181).

Obstacles in way of dealing with, Naik (339); Kembhavi (467).

Obstacles in way of dealing with, and proposal, Kothawala (482).

Preventive measures in Baroda, and popularity of inoculation in-Preventive measures in Baroda, a creasing, G. H. Desai 49,185-9.

Spread of, owing to inadequate grazing facilities, Kothawala (483). Veterinary aid during, should be dealt with by provincial authorities, Kembhawi (466).

DISPENSARIES:

Administration by Zillah and Taluka Local Boards advocated, Kothawala (488). Control:

by Agricultural Department advocated, Kothawala (488). by Local Boards:

Difficulties caused by, Baroda, G. H. Desai (181), 49,052-4. no Real control by, and transfer to provincial authority advocated if worked efficiently and economically, D. P.

Desai (317).

and System working well, Naik (339); Kembhavi (466). and not Working satisfactorily, Kothawala (482).

by Provincial authorities:
Advocated, G. H. Desai (181); Naik (339), 50,122-6;
Kothawala (482).
not Advocated, Kembhavi (466).

by Veterinary Department or Agricultural Department advo-cated, Kothawala (482).

Expansion not adequate, D. P. Desai (317); Naik (339); Kembhavi

(466).

Location near to cattle market, desirability, Devadhar (230).

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Veterinary—contd.
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DISPENSARIES-contd.

Needed in South Daskroi taluka, Kothawala (488). Practical demonstration and practical results would increase use of, Devadhar (230).

Touring:

Advocated, Kembhavi (466); Kothawala (482).

Insufficient, Naik (339).
None known of, Bhagwat (440).

Question of value of, G. H. Desai (181).
full Use made of, Naik (339).
full Use made of, if available, but most too far away, Kembhavi

(466).

full Use not made of, as too far from villages except for some surgical treatment. Kothawala (482).

Education, proposals for improvement, Kembhavi (467).

Indigenous science, suitability of, and need for revival and improvement, Nagpurkar (367), (371), 50,606-11.

Itinerant Assistants, proposal for, Bhagwat (439-50).

Local drugs used by cultivators, improvement advocated, Naik (339).

Mobile corps for combating enjectic diseases proposal. Kembhavi (467).

Mobile corps for combating epizootic diseases, proposal, Kembhavi (467).

PREVENTIVE INOCULATION:

Extension, proposal, G. H. Desai (181-2).

Fees:

Charged in case of diseases other than rinderpest and deterrent effect, Kembhavi (467). not Charged and should not be charged, G. H. Desai (182).

Undesirable, Naik (339). Obstacles in way of, G. H. Desai (182); Kembhavi (467); Kothawala (482).

Research:

Central organisation financed by provincial subsidies, proposal, G. H. Desai (155).

further Facilities advocated, Naik (339)

further facilities advocated and should be carried on by Provinces. Bhagwat (440).

Muktesar, extension of scope advocated, Kembhavi (467). Provincial institutions:

Advocated, Kembhavi (467).

not Necessary, G. H. Desai (182).
into Rinderpest and hæmorrhagic septicæmia, need for, and should be undertaken by Central Government, G. H. Desai (182).

SERUM:

no Delay or difficulty experienced in securing, G. H. Desai (182). no Difficulty known of, Kembhavi (467).
Supply, in Baroda, G. H. Desai (314).

SERVICE:

Extension advocated, and proposal, Bhagwat (435). some Good done by, but not as much as expected of it, Naik (338). not Satisfactory, D. P. Desai (314).

Staff, increase needed, Kothawala (478).

Superior Veterinary officer with Government of India, appointment not

advocated, Kembhavi (467).

Veterinary surgeons, shortage, G. H. Desai (181). Western science unsuited to Indian needs, Nagpurkar (367), (371), 50,486-93,

Wages, increase, Naik 50,282.

WALCHAND HIRACHAND, President, Indian Merchants' Chamber, Bombay: (510-513), 51,787-52,146.

Agricultural labour, system of engagement and payment, 52,053-7, 52,062-4.

Agricultural operations, 51,848-65, 52,058-61, 52,068-72.

WALCHAND HIRACHAND-contd.

ADMINISTRATION:

Interests of trade, industries, commerce and agriculture bound up together, (510).

Railways, development, backwardness of Bombay Government and

non-carrying out of projected schemes and proposals, 51,921-4, 51,969-94, 52,080-4, 52,108-13.

Roads, canal, opening of, to public advocated and small toll would not be objected to, 51,825-9, 51,891-8, 51,995-2000, 52,078-9.

Telegraphs and telephone, Irrigation Department, opening of, to public advocated, 51,825, 51,830.

AGRICULTURAL DEPARTMENT, advice sometimes not available owing to exhaustion of travelling allowance grant, 51,848.

AGRICULTURAL INDEBTEDNESS:

Cause of, (511).
Disposal of produce to sowcars, low price in some cases, 51,833-6.
Improvement of return from agriculture the only remedy, (511).

Rates of interest, (511).

Repayment, reasons preventing, (511). Unprofitableness of agriculture, and question of reasons, (511), 51,938-40, 52,119-33.

AGRICULTURAL INDUSTRIES:

Apiculture, special climate required, (512).
Dairying, not suitable for all parts of the country, (512).
Fruit-canning, etc., personal experience, 52,066-7.
Hand-spinning, possibilities of, and proposals for development as
All-India subsidiary industry, (512), 52,089-91. Proposals, (512).

Sericulture, special climate required, (512).

Co-operation, rate of interest, (513).

CROPS:

Commercial, discouragement not advocated, 52,134-5. Seed, Government depots for, proposal, 52,085-8.

DEMONSTRATION AND PROPAGANDA

Extension advocated, 51,796-7.

Lantern shows, etc., illiteracy a bar to effectiveness of, (511), 52,118.

EDUCATION:

Agricultural:

Manjri, short courses at, and value of, 51,857-9, 51,920-4. Manjri, short courses at, and value of, 51,857-9, 51,920-4. in Primary Schools, advocated, (511), 51,801-6, 51,956-7. Short courses for adults, scope for extension, 51,925. Short courses at Agricultural College, public should be better informed of, 51,963-5.

Agricultural bias schools, 51,958-61.

Free, compulsory vernacular education advocated, 52,073-5. Illiteracy, difficulties caused by, (511).

Nature study advocated, 51,804-5.

Necessity and importance of spread of, (510-11), 51,798-9.

FINANCE, Agricultural Banks needed, (512).

FRUIT GROWING, personal experience, 51,863.

GREEN MANURE, growing of, should be encouraged, but full water rates charged, 52,071-2.

Consolidation, question of employment of persons displaced, 52,104-7.

WALCHAND HIRACHAND—contd.

HOLDINGS—contd.

Fragmentation:

Evils of, (511).

Fixing of economic limit below which no subdivision should be allowed, proposal, (511-2), 51,936-7.

Hindu Laws of Inheritance a cause, (511). Legislation for prevention of, without going against Hindu and Mahommedan laws of inheritance would be welcomed, 51,966-8.

IMPLEMENTS, tractors, use of, 51,848.

INDIAN CENTRAL COTTON COMMITTEE:

Money spent on putting up plant at Matunga, objection to, (510). Useful work done by, (510).

Indian Merchants' Chamber, Bombay, representation on Bombay Legislative Council and in Legislative Assembly, 52,077.

IRRIGATION:

Canals:

Distribution of water, control by Agricultural Department advocated, (512), 51,811-4, 52,114-7, 52,136-9.

Outlet wells, insistence on construction of, by cultivators, hardship of, 51,845-7.

fixing of, should lie with Agricultural Department, Rates, 51,815-6.

Department, assurance to cultivators of certain amount of water needed, if land developed, 51,859-62, 51,864-90.

Diversion of water to industrial interests, 51,959-62, 51,866-90.

Telegraphs and telephones, opening of, to public advocated, 51,825, 51,830.

MARKETING:

Facilities unsatisfactory, (512).

Information to cultivators re market conditions, etc., useless at present owing to illiteracy, (512).

Middlemen, charges not excessive, 51,832-3.
Reputation of Indian goods, measures for improvement of, would be approved, 51,841-5.
Transport and communications, backwardness of Bombay Government of prograds 51,921 4

ment as regards, 51,821-4.

RATE OF EXCHANGE, 1s. 6d., bad effects as regards agriculture, 51,849, 51,941-7.

RESEARCH:

Extension of, scope for, (510), 51,796-7. Extension of, tax on agriculture would not be objected to personally, 52,004-8.

Organisation on lines of Indian Central Cotton Committee, extensions.

sion to other crops, proposal, (510-1), 51.788-95.

SUGAR BUREAU, useful work done by, (510).

TARIFF, export duty not advocated, 52,008.

Weaving, see Spinning and Weaving under Agricultural Industries.

Weights and Measures, sec under Marketing.

Welfare of Rural Population:

AGRICULTURAL OR DEVELOPMENT Associations: Devadhar (223), 49,324.

Assistance of revenue authorities needed, Ransing (389), 50,676-8. the Best medium for demonstration and propaganda, Ransing (389). Capital fund, collection by levying cess of one anna per rupee of assessment, proposal, Ransing (389).

Welfare of Rural Population-contd.

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AGRICULTURAL OR DEVELOPMENT ASSOCIATIONS-contd.
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Carrying out of rural welfare work by, should be possible if Government subsidy received, Ransing 50,707-9.

as Centres of social service or community service, possibility, Devadhar 49,403.

Constitution and work of, V. L. Mehta (103-4), 48,657-9.

Dhulia: Collection of indents and supplies through co-operative societies

Collection of indents and supplies through co-operative societies under consideration, Ransing 50,719-20.

Particulars re, work of, etc., Ransing (387-8), (389), 50,699-706, 50,730-9, 50,754-9, 50,771, 50,778.

Supervision of co-operative societies, Ransing 50,710-12.

Undertaking of rural welfare work, possibility of, with Government financial assistance, Ransing 50,707-9.

Work by people from the interior, Ransing 50,715-8.

Extension of scope, proposals, Ivendana 49,460-8, 49,477.

Government subsidies, proposal, Ransing (389), 50,704-5, 50,754-6.

Registered under Co-operative Societies Act, constitution and work of, V. L. Mehta (103-104), 48,657-9.

Relations with Provincial Institute, Devadhar 49,400-2, 49,458.

Supervision of co-operative societies by, advocated, Ransing 50,712.

Supply of information re market conditions to, advocated, Ransing (391).

Scheme for, Kembhavi (461).
Social work and village reconstruction schemes would be approved,
Ransing 50,763-74. Value of work of, Sir L. S. Mehta 49,024.
Workers, difficulty of obtaining, Ransing 50,699-702.

Agriculturists illiterate, poor and helpless, Naik (341).

Area of land required to maintain family of three, Sir L. S. Mehta.

48,988-94; G. H. Desai 49,283-5.

Baroda, work re, G. H. Desai 49,212-4.

Retterment change in social outlook processor G. H. Desai 40,200

Baroda, work 7e, G. H. Desai 49,212-4.

Betterment, change in social outlook necessary, G. H. Desai 49,203.

Boards of Rural Economic Inquiry, proposed formation of, Sir L. S. Mehta (143), 48,977, 48,979, 49,011; Devadhar (219-20), 49,307-9.

Conditions of agriculturists, G. H. Desai (196).

Condition of poorer classes, Peck (276).

Contracting margin between agricultural income and expenditure, V. L. Mehta (106), 47,798,99.

Mehta (106), 48,728-32.

Co-operative societies' work for uplift of conditions, *Devadhar* 49,478-85. Department of Local Self-Government, scope for work by, and proposals re, G. H. Desai (195), 49,062-5.

Economic condition of agriculturists in ryotwari and zamindari tracts, comparison advocated, Sir L. S. Mehta (139).

Economic condition of farmers must be improved, Nagpurkar (374).

Economic condition of the people, little genuine interest shown Central and Provincial Governments, Sir L. S. Mehta (138), 48,952.

ECONOMIC SURVEYS:

Advocated, and proposed means of carrying out, G. H. Desai (195), 49,214-5; Naik (341); Nagpurkar (374); Gordon (418), 51,006-9, 51,123-7; Bhagwat (447); Kothawala (485). by Agricultural Department advocated, Kothawala (489).

by Agricultural Department acrossor, in Baroda, G. H. Desai 49,214. by Bombay Provincial Co-operative Institute, particulars re, Devadhar (220), 49,310-2, 49,377-81, 49,540-1. Dr. Mann's investigations should be taken as guide, Bhagwat (447). Intensive with regard to group of villages, and exter regard to larger areas, proposed, Gordon (418), 51,128. Pardi taluka, results, D. P. Desai 50,051-6.

Method of carrying out, proposals, Indian Central Cotton Committee-

Welfare of Rural Population-contd.

FUNDMIC SURVEYS-contd.

not Necessary, material and statistics already available, D. P. Desai (320-1).

Expenditure on marriages, Gordon 51,183-6.

Gymnasiums and sports, proposal for, Devadhur (232), (242), 49,363-5. Health conditions, improvement, proposed measures for, V. L. Mehta (110); G. H. Desai (187); Devadhar (232), (241-2); Naik (340); Bhagwat

(442); Goheen (502).

Improvement of conditions, general desire for, Peck 49,618-20.

IMPROVEMENT:

Improvement of economic condition of agriculture necessary for, Bhagwat (442), (447).

Means of, Naik (341); Bhagwat (447-8); Kothawala (485), (489).
Medical relief, proposal for provision of, Sir L. S. Mehta (143).

Midwives, system of, and need for extension, Devadhar 49,362, 49,370-4. National Baby and Health Week Association, Devadhar 49,322-7. National Baby and Health Week movement, work among depressed classes, Devadhar 49,486-7.

Non-official agencies, particulars re present work of, and proposals for extension, Sir L. S. Mehta 49,030-1; Devadhar (242), 49,366-74, 49,455-77, 49,522-3, 49,538-9, 49,541, 49,556-69. Physical condition, Sir L. S. Mehta 48,995, 49,001-3; G. H. Desai

49.146. Physical reconstruction of villages, need for, and proposal, Bhagwat

(447).

Problem of, Devadhar (240-1).

10. (247).

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increased Production necessary, Sir L. S. Mchta 48,996, 49,013.

Sanitary conscience, need for awakening, G. H. Desai (187). Sanitary and hygienic improvement, Panchayats could undertake, Sir L. S. Mehta (143).

SERVICE OF RURAL INDIA SOCIETY:

Adjunct to Servants of India Society desired, Devadhar 49,473. Response not likely to be adequate, Sir L. S. Mehta 48,983-4, 49,025-30.

SERVANTS OF INDIA SOCIETY:

Organisation of District Agricultural Overseers into association on lines of, proposal, Goheen (497), 51,709, 51,736-7, 51,743-55. Work of, Devadhar (242), 49,366-7.

Social attractions of villages, need for increasing, G. H. Desai (194).

as Cause of indebtedness, G. H. Desai (160), 49,148-51.
Propaganda against, in Baroda, G. H. Desai 49,152-5.
Social service or community service, need for development of spirit of, Devadhar (241).

Social workers, organisations at present, and extension desirable, G. H. Desai 49,156-62.

Staff, requirements, Sir L. S. Mehta (143).

Standard of living, probable rise in, Gordon 51,051, 51,122.

Systematic effort to improve position of agriculturists needed, Sir L. S. Mehta 49,015.

Taxation levied in rural areas, greater portion of proceeds must be utilised in those areas, Sir L. S. Mehta (143), 48,950-1.

Thrift, need for instruction in, and work of co-operative movement re,

Sir L. S. Mehta 49,024. Village First Aiders, system of, and extension advocated, Devadhar (242), 49,361-2.

Welfare of Rural Population—contd.

Village leaders, importance of right type, and proposals re training of, G. H. Desai (195), 49,211-3.
Village life must be made more attractive, and proposed means, Sir L. S. Mehta (143), 48,950; G. H. Desai (195), 49,147; Kothawala (484), (485), 51,604-8.

VILLAGE LIBRARIES:

Baroda, G. H. Desai 49,206-10. Development desirable, Devadhar 49,505-6. Village libraries and clubs advocated, Devadhar (242).

Number limited and funds inadequate, Devadhar (241-2).
Revival of old panchayat system desirable, and agricultural atmosphere must be created, D. P. Desai 49,967-73.

Scope for improvement of village life by, and proposals, G. H. Desai 40,062 5 (194-5), 49,062-5. Well maintained and organised village panchayats advocated in all

villages, Kothawala (489). Wrestling, proposals for encouragement, Devadhar (242), 49,497-502.

Wells, see under Irrigation.

Wheat, see under Crops.

.Wild animals, damage to crops by, see under Crops.

GLOSSARY.

A			Thurston,
ADAT	•••		Brokerage.
ADATYA OR A			
AKHADA			An Indian gymnasium.
	• • •		Deccan hemp (hibiscus cannabinus).
			A large evergreen tree (tamarindus indica).
	•••		Pine apple (ananas sativa).
Anavil	• • • •		A caste of Brahmins found mostly in Gujarat.
Annawari			Valuation in term of annas (one anna being one-sixteenth
			of a rupee).
_			
BABU			A title of respect, sometimes of contempt.
BABUL	•••		The name of a tree (acacia arabica).
BAGAYAT			Garden.
BAJRA OR BA	JRI		A small millet (pennisetum typhoideum).
BANDHARA			A weir or embankment.
BANIA			A Hindu trader who is generally also a money lender.
BARANI			Watered by rain, not by irrigation.
BATAI			Division of the crop between the cultivator and the
DAIAI	•••	•••	landlord.
BAWTA			
	•••		A millet (eleusive conecaua).
Bhagdari	• • •	•••	Literally, holding a share; a kind of land tenure preval-
T			ent in parts of Gujarat, joint tenancy.
BHAJAN			Prayer, religious song.
Внав	• • • •	• • •	Literally, a load; a weight used in the case of cotton in
_			_ Gujarat.
Bharni			The name of a constellation.
Вірі	• • •		A cigarette.
Вісна			A measure of land; the standard or pucca bigha is 3,025
			square yards or five-eighths of an acre.
Вів	•••		Pasturage, grass land.
Воја			A bundle or a load.
BOR, BORE			Plum.
BORDI			The Indian jujube (zizyphus jujuba).
	•••		Land irrigated from an inundation canal.
	•••		
BUND	•••		A field embankment.
BUNDOBAST	•••	•••	Arrangements.
CASHEWNUT			The nut of a tree (angeardium escidentale) found
CABLEWNUT	•••	•••	The nut of a tree (anacardium occidentale) found especially in sandy places.
C			A torm applied to land held revenue free on condition
CHAKARIAT	•••	•••	A term applied to land held revenue-free, on condition
			of performing some office or discharging some obliga-
~			tion.
CHARKA, CHA	RKHA	• • •	A spinning wheel.
CHAROTAR	• • •		Name of a tract in Gujarat.
CHATTAK			A weight, one-sixteenth part of a seer.
CHIKU	٠٩		A fruit.
CHOLA		,	Gram (cicer arietinum).
C HOWRA			A place where the public in a village foregather.
CHUNAM			Lime.
-			
DADAM	•••		Pomegranate (punica granum).
Dak			A post, a stage or station.
Dalal	•••		An agent or broker.
DAMDOPAT		• • • • •	An ancient Hindu provision by which the total interest
	•		on a loan may not exceed the amount of the principal.
DESHI, DESI			Native to the country, indigenous.
DEWASTHAN			A temple.
DHAND		•••	A tank.
DHED			A man of a low caste, employed as a watchman and
	•••	•••	
			messenger in the village establishment. In some places,
Dimer			a scavenger.
DIWALI	•••		Commercial new year among Hindus.
DOKRA	•••	•••	A bag of unpressed cotton of varying weight, generally
			five maunds.
			•

GLOSSARY.

		OLOSSANI.
GADINAD		A tract in the Karnatak.
GAMTHAN	•••	Village site.
	•••	A namedia desired from the unfertilized flavors of
GANJA	• • • •	A narcotic derived from the unfertilised flowers of
a		cannabis sativa.
GAOCHABAN	• • •	Grazing land.
GAUCHAR	• • •	Grazing land.
GAWAR		A pulse (cyamopsis psoralioides).
GHANCHI		An oil maker or dealer.
Ghani		An oil mill.
GHI, GHEE		Clarified butter.
GRAM		A village.
GUNTHA		A land measure, one-fortieth of an acre.
GUR		Unrefined Indian sugar, jaggery.
	•••	Unicanou indian sagar, jaggery.
Hakim		A practitioner of the Muslim system of medicine.
HALI		A bondsman, a labourer.
HAMALI		Porterage charges.
HARI		A peasant.
HIMAYAT		Water assessment.
Hundi	•••	A bill of exchange.
HUNDI	•••	A off of exchange.
INAM		Grant of land wholly or partially rent-free.
INAMDAR		A holder of a wholly or partially rent-free land.
INAMDARI		
INAMDAKI	•••	Held wholly or partially rent-free.
JAIN		A follower of a sect amongst Hindus, which worships
• A11.	•••	certain deified mortals.
Taxon		The block plum (greenessing sambelone)
JAMBU	•••	The black plum (zyzygium jambolana).
JATRA	•••	A pilgrimage.
Î INJIAY	•••	A kind of grass.
JINJIVA JIRAYAT	• • •	Arable land, not artificially irrigated.
		Literally, mercy on life: objection to killing anything.
Јовиз		An astronomer.
Juar		The large millet (sorghum'vulgare).
Judi		Dues payable by a holder of inam land to Government in
• • • • • • • • • • • • • • • • • • • •		lieu of land revenue.
	•	grow or resident coverage,
KACHERI OR I	KATCHE	RI A court, an office.
KADBI	*	Straw of inar (sorahum vulgare).
KALAMBANDI		Straw of juar (sorghum vulgare). Held under articles of agreement.
KALLAR	• · •	meia anaer arvietes er agreement.
		Alkalina •
V ANDELAD	•••	Alkaline.
KANTHAR		Alkaline. A bush.
		A hush Cotton with the seed still adhering (unginned).
KARANJA, KAI	RANJI	Alkaline A bush Cotton with the seed still adhering (unginned) An evergreeen jungle tree (pomgamia glabra).
KARANJA, KAI KARDI	RANJI	Alkaline A bush Cotton with the seed still adhering (unginned) An evergreeen jungle tree (pomgamia glabra) Safflower (carthamus tinctorius).
Karanja, kar Kardi Katcha or k	RANJI UTCHA	Alkaline A bush Cotton with the seed still adhering (unginned) An evergreeen jungle tree (pomgamia glabra) Safflower (carthamus tinctorius) Raw, immature, crude.
KARANJA, KAI KARDI KATCHA OR K KHADDAR OR	BANJI UTCHA KHADI	Alkaline A bush Cotton with the seed still adhering (unginned) An evergreeen jungle tree (pomgamia glabra) Safflower (carthamus tinctorius) Raw, immature, crude. Coarse cloth.
KARANJA, KAR KARDI KATCHA OR K KHADDAR OR KHALSA	BANJI UTCHA KHADI	Alkaline A bush Cotton with the seed still adhering (unginned) An evergreeen jungle tree (pomgamia glabra) Safflower (carthamus tinctorius) Raw, immature, crude.
KARANJA, KAR KARDI KATCHA OR K KHADDAR OR KHALSA	RANJI UTCHA KHADI	Alkaline A bush Cotton with the seed still adhering (unginned) An evergreeen jungle tree (pomgamia glabra) Safflower (carthamus tinctorius) Raw, immature, crude. Coarse cloth.
KARANJA, KAR KARDI KATCHA OR K KHADDAR OR KHALSA	RANJI UTCHA KHADI	Alkaline A bush Cotton with the seed still adhering (unginned) An evergreeen jungle tree (pomgamia glabra) Safflower (carthamus tinctorius) Raw, immature, crude. Coarse cloth Land held immediately of government A measure of weight and capacity which varies according to the commodity, and, in some places in the case of the
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			GLOSSARY.
MA BAP			Literally father and mother; a protector.
MAG	••• \		A kind of pulse (phaseolus mungo).
Mahajan			A merchant.
Mahar	•••		A low caste, members of which are generally inferior
MAHUDA			village servants. A deciduous forest tree (bassia latijolia) whose dried
Mal			flowers are eaten as food or distilled into liquor. Extended tract of bare stony land.
MAL MALGUZAR			Person paying revenue assessed on an estate or village,
	•••	•••	whether on his own behalf or as the representative of others.
MALKHAMB	•••		A vertical bar for gymnastic exercise.
Mamlatdar	•••	•••	Revenue officer in charge of a taluka.
MANBHAT	• • •		A preacher.
MANDAL	•••		An association.
MANDI			Bearish tendency in a market.
Mangalsuti	8.A	•••	A thread or silken string worn by the bride during the marriage celebration, and afterwards as long as her husband lives.
Матн			The kidney bean (phaseolus aconitifolius).
Maund	•••		A measure of weight varying in value in different
MAVAL			places. The tract lying along the valleys of the Sahyadri range of
MELA			mountains to the west of India. A fair.
	OFFAS		The country as opposed to the town.
Mosambi			Sweet lime.
Микні			A headman.
MUNGARI			An early variety of a crop.
MUNSIFF			A civil judge.
MURUM	•••	•••	Soft stone ordinarily used for road construction.
NAG	•••		A varying measure of weight for cotton.
NAKSHATRA Nala, nulla			A constellation of stars.
NAMUNA			A water-course. Sample.
NARVA			An undivided village held in coparcenary and managed
		•••	by a few of the chief sharers.
Narvadari	•••		A system of tenure in which a village is held in coparcenary.
NAZARANA	•••		A present, a fee.
N1M(B)	•••	•••	A large forest tree (azadinachta indica).
PALLA		•••	A measure of capacity or weight, of varying capacity, usually 120 sers.
PANADE	•••		A water divine.
Pancha, panchayat			Lit. a committee of five; used to describe an association of any number of persons, instituted for objects of an administrative or judicial nature.
PAPAD			A thin crisp cake, made of the flour of any kind of pulse.
PAPANAS			Pommel.
PAT			A small raised water-course for irrigating fields.
PATEL	•••		The headman of a village.
Patidar	•••	•••	Literally, a hereditary cultivator, a caste of cultivators in Gujarat.
Patwari			A village accountant.
PERU	•••		Guava.
PHAWRA	•••	• • •	A kind of hoe or spade.
PINJAR	•••	٠.	A cotton cleaner, one who extracts the seed, and prepares
PINJRAPOLE			it for spinning.
PIPAL (PIMP	 AT.)		A refuge home for cattle. A sacred tree (ficus religiosa).
PRAGATHI ADHIKARI			Development officer.
PUCCA			Solid, firm.
PUNDIA	•••		A variety of thick sugarcane.
			cxxvii

GLOSSARY.

RAB		Inspissated juice of the sugarcane.
RABARI	•••	A caste of cowherds or milkmen.
RABI		Season of crops sown after the end of the rains, i.e., in
	•••	winter.
Rаміа		Deep wells requiring large buckets for drawing water.
RAYAT (BYO)	٠	A cultivator, a peasant proprietor.
RYOTWARI		The system of tenure under which the land is held by the
I YOT WARI	•••	
		cultivator direct from Government.
~		
SALA		A grass stack.
Salami	• • •	A fee levied as a quit-rent.
Salotri		A veterinary assistant.
Sann		Bombay hemp; a leguminous fibre crop (crotalaria
		juncia); also used as a green manure.
Sari		A long cloth worn by Hindu women, wrapped round the
		body.
SARKAR	. • • •	Government.
Sarkari		Pertaining to the supreme authority, the Government.
SARBAV		Mustard seed.
SARUB		Crane (bird).
SEVA		Service.
Sev		Vermicelli.
SHARAKATI		A term applied to villages or estates, the revenues of
CHARACATI	•••	
SHIKAR		which are shared by Government with others.
	•••	Hunting.
SLOKA	•••	A kind of verse.
SOWCAR	•••	A moneylender.
SUNDHIA	•••	A variety of fodder, juar (sorghum vulgare).
SURTI	• • •	From Surat, a district in the Bombay Presidency.
SWADESHI	• • •	From swa (own) and desh (country); indigenous, made in
		the country.
T		A 1
TACCAVI	•••	An advance made by Government to cultivators for agri-
-		cultural purposes.
TAL	•••	A dam.
TALATI		A village accountant.
TALUKA	•••	A part of a district.
TALUKDAR		The holder of an estate—usually comprising several
_		villages.
Talukdari		The tenure, office or estate of a talukdar.
Тел		Bullish tendency in a market.
TEMBHURNI		
THAKARDA	•••	A tribe originally inhabiting the forests, some members
		of which are now cultivators in Gujarat.
Ти	•••	An oilseed (sesamum indicum).
TUR		Pigeon pea (cajanus indicus).
	•••	I igoon pea (cajanus inateus).
UTTARA		The winter solstice.
CIIAMA	•••	The winder soldbies.
VAID		A practitioner of the Hindu system of medicine.
• AID	•••	A practitioner of the mindu system of medicine.
WAL		A twining herb (dolichos lablab).
WAL	•••	A twining nero (aoutenos taotao).
YERINAD		Tract of black soil in the Karnatak.
LEKINAD	•••	Ifact of black soil in the Astratak.
ZABARDASTI		Violence, force, oppression.
ZAMINDARI		For the big landholders; belonging to the big landholders.
ZILLAH	•••	A district.
ZIJILAH	•••	A triou icu.