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THE INDIAN JOURNAL OF AGRICULTURAL ECONOMICS



(Organ of the Indian Society of Agricultural Economics)

Vol. XIV	APRIL—JUNE 1959	No. 2
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CONTENTS

ARTICLES

Ceiling on Land Holdings in India	<i>T. P. Subramonian</i>
Farm Mortgages and Co-operative Finance ..	<i>K. V. Sri Ram</i>
India's Food Crisis	<i>M. B. Desai</i>

RESEARCH NOTES

State Trading in Foodgrains	<i>M. L. Dantwala</i>
Some Indicators of Farm Human Labour Productivity	<i>A. S. Kahlon</i> <i>M. L. Bharadwaj</i>
Radical Changes in Agricultural Labour Conditions	<i>D. Yakushkin</i>
Direct and Indirect Benefits of Irrigation Projects	<i>Research Programmes Committee, Planning Commission</i>

World Food and Agriculture 1958

GLEANINGS

BOOK REVIEWS (see inside cover)

Rs. 4.00

BOOK REVIEWS

		Page
Digby, Margaret	<i>Co-operatives and Land Use</i>	M. L. Dantwala 62
Bombay State Co-operative Bank Ltd.	<i>Report of Crop Loan Evaluation Committee, Part I</i>	M. L. Dantwala 64
Kotdawala, M. R.	<i>A Report on the Working of Co-operative Farming Societies in Gujarat with special reference to Surat District</i>	M. B. Desai 66
Gujarat Co-operative Farming Survey Committee, Ahmedabad	<i>Co-operative Farming in Gujarat (A Study into the Working of the Co-operative Farming Societies in Gujarat)</i>	M. B. Desai 68
Bhattacharjee, J. P. and Associates	<i>Studies in Rural Change: Sahajapur : West Bengal—Socio-Economic Study of a Village</i>	(Mrs.) Tara Shukla 70
Agricultural Economics Research Institute, University of Oxford	<i>The Agricultural Register : New Series — Changes in the Economic Pattern 1956-57</i>	V. M. Rao 72

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CONTENTS

ARTICLES	Page
Ceiling on Land Holdings in India <i>T. P. Subramonian</i>	1
Farm Mortgages and Co-operative Finance <i>K. V. Sri Ram</i>	16
India's Food Crisis <i>M. B. Desai</i>	27
RESEARCH NOTES	
State Trading in Foodgrains <i>M. L. Dantwala</i>	38
Some Indicators of Farm Human Labour Productivity <i>A. S. Kahlon</i> <i>M. L. Bharadwaj</i>	40
Radical Changes in Agricultural Labour Conditions <i>D. Yakushkin</i>	45
Direct and Indirect Benefits of Irrigation Projects <i>Research Programmes Committee, Planning Commission</i>	47
World Food and Agriculture 1958	50
GLEANINGS	55
BOOK REVIEWS	62

CONTENTS

	Page
REVIEWS IN BRIEF	75
ADDITIONS TO THE LIBRARY	85
ANNOUNCEMENT OF PRIZE AWARDS 1958 ..	93
NINETEENTH ANNUAL CONFERENCE OF THE SOCIETY, DECEMBER, 1959	93
BALANCE SHEET AND INCOME AND EXPEN- DITURE ACCOUNT OF THE SOCIETY FOR THE YEAR ENDED 31st MARCH, 1959	94

INDIA'S FOOD CRISIS*

By

M. B. Desai

The report embodies the results of the findings of a Team of U. S. experts who came out to India under the sponsorship of the Ford Foundation to advise the Government of India on India's food crisis and the ways and means of meeting it particularly in the context of the Third Five-Year Plan. The report suggests target for the Third Five-Year Plan as well as steps to achieve it. It is a useful document providing a comprehensive account of India's agricultural problems and their contribution towards the food emergency. In addition to detailing the many and varied rural problems, the publication also formulates an approach to circumvent them so as to make them contribute towards higher food production in particular and agricultural production in general. It is extremely difficult to do justice to the various issues raised in the report in a short review article of this nature. We would, therefore, confine ourselves to examining the recommendations regarding food production and the measures to reach the targets.

Food Production

The Team feels that a production target of 110 million tons by the end of the Third Plan period would both be essential and feasible. They have arrived at this target on the basis of the possibilities offered by the Indian situation, the increase in consumption by an estimated population of 480 millions at the end of the Third Plan through an addition of nearly 80 millions during the course of five years, the requirements of increased consumption arising from improvement in dietary habits due to higher incomes and employment, provision for poor crop years and in general maintenance of minimum food reserves to meet emergencies. The Team feels that although the average performances in productivity in various spheres in Indian agriculture are very low as compared to other advanced countries of the world, the best in Indian agriculture compares very favourably with the best elsewhere. They, therefore, feel that if the low average performance is pushed to the highest level attained by some Indian cultivators, the task would not be difficult of achievement. The Team feels that though India is making a steady progress in increasing food production, the rate is very slow and must be tripled if the Third Plan target of 110 millions is to be achieved. If the present rate of increase continues, the Team feels that the gap between supplies and target will be to the tune of 28 millions by 1965-66. This would involve a short fall of 25 per cent in terms of needs. They feel that besides being unwise to depend on imports of food or rationing, no amount of consolidated programmes under these two heads would meet a crisis of the magnitude described above.

It is difficult for one to express any opinion on the food production target suggested by the Team for the Third Plan. Composed as the Team was of eminent experts in the sphere of Agricultural Economics and Technology, it must

* Based on the Report on "India's Food Crisis and Steps to Meet It" by the Agricultural Production Team, sponsored by the Ford Foundation, Government of India, Ministry of Food and Agriculture and Ministry of Community Development and Co-operation, April 1959.

be presumed that they must have arrived at the target on the basis not only of needs but also the practical possibilities of achieving it. There are, however, a few points which arise in the mind of one closely associated with the developments in the country as also with its manifold rural problems. He would, for instance, desire to know actually how the target figure has been arrived at. The basis described in the report is sound and should help normally in arriving at correct requirements. However, it would be of interest to know as to how the various needs contribute to the target fixed and the extent of emphasis on each of them. If the report has elaborated the various factors like increase in food requirements due to increase in population, higher consumption due to improvement in the level of incomes, failures of the seasons, and needs of building up reserves, etc., probably, it would have helped us in getting a clearer picture of the target. This would not so much be from the point of view of academic exercise but also to emphasise the emergency in a correct perspective so as to awaken the people, particularly the rural communities, to the magnitude of the task and to prompt them to a greater effort.

In this connection, it would be useful to observe the trends in India's food production during the last 10 years in order to understand what we have been able to achieve and on the basis of it to project the possibilities of a bigger achievement. On the eve of the launching of the First Plan in 1949-50, the total food production in the country was 57.9 million tons. The production of foodgrains during the subsequent years was as follows :

1950-51 ..	52.4 million tons.	1955-56 ..	65.3 million tons.
1951-52 ..	52.9 " "	1956-57 ..	68.7 " "
1952-53 ..	58.8 " "	1957-58 ..	62.0 " "
1953-54 ..	68.9 " "	1958-59 ..	73.00 " "
1954-55 ..	67.1 " "		(Estimates)

Looking to the overall situation, it may be pointed out that the production from 1949-50 to 1958-59 rose by 15.1 million tons or by about 26 per cent. This works out to a rate of increase of about 2.6 per cent on an average. The estimates for 1958-59 have given rise to optimism about possible achievements during the remaining period of the Second Plan. Instead of about 75 million tons of production estimated by Foodgrains Inquiry Committee to be reached by 1960-61 as against the Second Plan target of 80 million tons, on the basis of the performance last year, we might, in all probability reach a level of production of 78 million tons in 1960-61. If this happens, the rate of increase in food production during 1949-50 to 1960-61 would roughly work out at about 3 per cent per year. If in 1960-61, India could produce 78 million tons of foodgrains, a target of 110 million tons in 1965-66 would be a jump of 32 million tons or an increase of about 41 per cent over a period of five years or a rate of increase of about 8 per cent per year. In the context of 2.6% rate of increase per annum during the earlier decade, an increase of roughly 41 per cent only in one plan period appears to be very ambitious. Similarly, a rate of increase of 8 per cent in the

Third Plan period in the context of the performance of the earlier two Plans appears to be credulous. This is, of course, an analysis of a student of agricultural economics who has little background of econometrics or statistics. This is based on past performance and probably does not take into account the potentialities of efforts in future. But it would be of considerable interest to be reassured of the practicability of the targets for the Third Plan. It would also be of considerable interest to the country to be told of the spheres in which we really have not made serious efforts to increase food production and which are precisely the weak links in the rural economy by bridging which it would be possible to produce phenomenal results.

The Team has also assessed the problem of rural unemployment and under-employment. Out of the 65 million rural families, 50 million depend directly on agriculture. Of these 50 million agricultural families, 20 million have little land. Actually, about 10 million of the group are landless. It is among this group that chronic underemployment and unemployment prevails. Moreover as rural population increases, the number of landless will further grow. It will be one of our major tasks to find work for this surplus work-force. The Team feels that the idle labour force can be employed to increase output. Employment of over-abundant rural labour would bring important social gains as well. The idea would seem sound, the only difficulty is to concretely spell out appropriate resource combinations in agriculture with considerable emphasis on labour utilisation. The problems of work opportunities and labour availability and the concomitant organisational issues of co-ordinating both are major issues, requiring serious thought.

Another interesting point about the Team's recommendation on priorities for public works programme to achieve quick rises in food production will need an effort at the stage of implementation. Priority is suggested for activities which will make the greatest and the most immediate contribution to food production, and where serious rural unemployment prevails. It would require some effort to locate problem areas with high food production potential.

Price Stabilisation

To ensure incentives to higher production the State should come forward to guarantee minimum prices to the cultivator in advance of the planting seasons. The additional measure recommended to serve as a fillip to this incentive is a market to the cultivator for his crop at minimum prices whenever he wants to sell. This market should be available to him at a distance which he can cover conveniently by a bullock cart. The above two would inevitably meet the need for local storage of crops and to ensure an even flow of commodities at reasonable prices.

The Team suggests a permanent machinery which would formulate the price policy and implement it with the required action. It, however, envisages very comprehensive and hair-splitting functions for this agency. For instance, the pricing agency is expected to determine the base prices and the permissible range of their variations. It is also expected to announce the prices in advance of the sowing season. It should also initiate purchase or sale of foodgrains according

to circumstances. Furthermore, it will determine the location for stock of reserves of foodgrains at different places and at different times according to the requirements of the situation, and for that purpose, determine export and import duties and quotas to control prices as may be necessary. Finally, as a measure of effectiveness, these agencies should also undertake grading.

In order to understand the magnitude of the task allotted to the permanent price determining and enforcing agency, it would be appropriate to recapitulate some of the basic conditions of prices in our country. The discrepancy between the producer and the consumer prices of foodgrains in particular and agricultural commodities in general is wellknown. Besides, these vary from region to region. This state of affairs is due to a variety of factors such as defective marketing system, inadequate or absence of grading, regional variations in production and prices, and lack of knowledge of market conditions on the part of cultivators not only in different parts of the country, but also in the same areas. All these contribute towards a state of affairs where agricultural prices in general and food prices in particular continue to be in a perpetual mess. It is this situation which gives rise to excessive consumers' prices coupled with low returns to the cultivator of foodgrains. It is precisely this situation that acts as a serious handicap in our planned effort in which the plan expenditure continues to mount up without a corresponding relief to the agricultural sector and does not result in higher food production, and better marketable surplus which can be made available for urban consumption. In a situation of this nature, and in the context of lack of any background and experience whatsoever, the array of functions envisaged for permanent pricing agency appear to be formidable. A simple pricing and distribution mechanism which would iron out these discrepancies in the existing situation and give improved returns to the cultivators without unduly burdening the consumer would be more welcome.

But it is not merely the elaborate objectives of price stabilisation that is puzzling but also the criteria laid down for price fixing which add a good deal to the task. For instance, the Team suggests that a number of factors should go in to the fixing of minimum prices. The prices, for example, should protect the cultivator against unduly low prices and losses. It should even out seasonal fluctuations by sustaining prices during the harvest season and ensure a smooth operation for the market by ironing out flux and scarcities except for those quantities required by the Government for buffer-stock operations. The prices besides should be set at a level which would not cause hardships to the consumers. It should also be set at levels which would achieve required production and marketable surplus. Further, the floor prices for the producers should not be oblivious to the best interests of the economy as a whole for if the prices are set too high, it will become a drain on the national treasury. The Team feels that under Indian conditions, large-scale transfer payments between the agricultural and other sectors of the economy are not feasible. Added to these are certain other wider requirements in price fixing. While fixing the prices, the Team says, that the agency should take into account the domestic and world supplies of foodgrains and on the basis of import prices as well as the domestic demand, the floor should be arrived at. The price guarantees should be with reference to different foodgrains with due regard to competition from other crops and also should take into account the handling margins and fluctuations in production. The Team appears

to have been conscious of the complexity of agricultural price stabilisation in India; for, they suggest modest beginnings. It has been suggested that the minimum prices for rice and wheat alone should be fixed to begin with on an All-India basis and for the other foodgrains on a regional basis.

One more rider added to the price fixing programme which is not likely to be appreciated is the suggestion of the Team that if possible and on the basis of other favourable circumstances, the floor price should be fixed 10 to 15 per cent below the prevailing import prices, depending of course on the proportion of imports to production. It is true that the international food prices appear to be relatively high as indicated by the prices we are paying for our food imports. But it is also true that in the artificial conditions created by control and exchange regulations, the free market forces are held considerably in check. In the context of a freer international trade, the food surpluses of some of the regions where agriculture is highly commercialised are likely to overwhelm the economies of under-developed areas. If this suggestion of a lower minimum domestic price was to have effect, it is extremely difficult to gauge the effectiveness of agricultural floor prices as production incentives in a country like India. There is little controversy about the need for a certain artificially pegged prices to achieve higher production in a difficult situation obtaining in our country. In this context, it is very likely that domestic prices might appear to be a little out of tune with the world prices, particularly in those spheres where production is meant primarily for home consumption. In view of this, it is not possible to visualise how far a relationship of domestic prices with world prices as envisaged by the Team would have the desired effect.

Land Reforms and Co-operative Farming

The main features of our land reforms in a nutshell relate to the reorganisation of tenurial patterns with a view to eliminating the difference between ownership and occupation. In the ryotwari tracts, the emphasis has been on the security of tenancy and fixation of reasonable rents. In some States like Bombay and Kerala; we have gone further and in a larger or smaller measure attempted to eliminate tenancy cultivation altogether. There are non-official efforts at reorganisation of land ownership in the form of *Gramdan* and *Bhoodan* but they fall more or less in the same pattern as aiming to achieve social justice and economic equality in the rural sector by giving land to the landless and the small peasant. The latest in the arena are ceilings on the land holdings and co-operative farming. In this broad framework of our pattern of land reforms, it would be interesting to examine the recommendations of the Team and ascertain how far the suggestions conform to our approach or how far they offer grounds for introspection.

There is considerable force in the feeling expressed by the Team that there is a good deal of uncertainty about land reforms in our country which adversely affect food production. In addition to limited effectiveness of legislation already enacted, the various laws are being revised frequently. New measures are adopted which besides being more radical than the old introduce absolutely a new element in the situation. All these leave no time for the changes to take effect or give scope for ascertaining whether a particular piece of legislation was useful and effective or not. The Team has mentioned two very significant facts about land

reforms. They say that whereas it is imperative to bring social justice to the rural sector by sparing land for the landless, it is equally essential to see that these objectives are achieved in a way that will not retard the increase in food production so vital to national well-being. One of the suggestions which the Team makes is extremely interesting in this context and would be shared by quite a few in the country. They say that many landless labourers would consider more secure employment at relatively higher wages than what they get now, just as much of an improvement in their conditions as membership in a joint farming co-operative or getting possession of some lands here and there. They have also pointed out that in this process of redistribution of agricultural lands equitably, care should be taken to see that independent and capable leadership among the cultivators is not only preserved but progressively nurtured. Another very material recommendation which has a direct relation with the redistribution of lands among the landless is the emphasis on the need for keeping the pattern flexible so as to leave scope for adjustments in land holdings and farm sizes when non-farm employment opportunities improve and a shift of population from agriculture becomes feasible. It is thus necessary to avoid freezing a pattern of land tenure that cannot be modified to meet changing conditions. Equally important is the emphasis the Team lays on standards of minimum resources per family along with a ceiling on holding which would create the right circumstances for achieving improvement in productivity with a certain minimum of combination of resources and land.

The Team favours co-operative joint farming on a voluntary basis. They have, however, indicated that just as a minimum unit of land and resources are desirable in the case of a peasant farm, in the case of co-operative farming also their deficiencies would not provide an adequate living. They also feel that co-operative farming as envisaged by them will be achieved slowly and, in the meantime, it would be desirable to encourage service co-operatives in which a number of farm units operated either by owners or tenants would come together in a co-operative organisation to secure jointly agricultural equipments like bullocks or mechanical power. They have also suggested that co-operative farming would more conveniently be organised where the landless are allocated land, as in such a situation, it would be possible to keep the ownership of the land with the State although its operation is transferred to the individuals. Such a group can then be made to join into a co-operative by which they will jointly own and operate equipments and also assist in planning and conducting their farm operations. The Team, however, feels that in many areas the land that will be available for distribution among the landless might not be suitable for operation in large tracts.

While discussing co-operative farming, however, the Team's emphasis has been on two or three material considerations. In recommending agrarian change, their emphasis has always been on opening out alternative sources of employment which would relatively offer better economic conditions to the surplus agricultural population. They have also emphasised the importance of economic incentives in agriculture. They say, "management assistance to cultivators, combined with supervised credit and perhaps with joint ownership of equipment, offers a way to obtain the advantage of better management while still retaining the incentives gained by individual operation." They have said that individual attention to land is a powerful drive for improvement of operations. They have also em-

phased the significance of combining rights and privileges with responsibilities. It would thus be useful to lay down certain minimum standards of performance in the interest of higher food production.

Likewise about the consolidation of holdings, they have emphasised the need for satisfactory settlement of tenurial problems including land ceiling so that the course of progress of consolidation can have a sure ground to proceed. The more important thing, however, which they have emphasised is the need for combining measures for land consolidation with soil and water conservation planning so that it would be possible to co-ordinate the work in both the spheres and save a large area of land that would be required for field irrigation, canals, drainage ditches, contour bunds, etc. Their idea seems to be that if the irrigation canals, etc., could be laid out on the boundaries of holdings and a provision made for them during land consolidation, it would minimise considerably the waste that is otherwise involved in laying them out later on. They also emphasised the need for preventing fragmentation of small holdings into tiny uneconomic units. This is essential both for the purposes of not allowing this problem to be intensified as time passes as also to prevent deconsolidation of consolidated holdings. For this purpose, they feel that a draft legislation be prepared for circulation among various States which do not have such laws to achieve a large measure of uniformity of approach in this sphere.

A few conclusions which emerge from the suggestions of the Team may be noted in passing. The suggestions of the Team have a good deal of force from the point of view of attaining higher productivity in agriculture as also keeping the pattern of the rural structure flexible for future growth and improvement. They have very usefully said that the radicalism that we have introduced in our land reforms to achieve social justice and economic equality should be tempered with the need for providing leadership among the cultivators as also to ensure resource availability. It would, therefore, be useful for the policy makers to devote serious consideration to these suggestions and see how far they could be utilised to our advantage.

Co-operation

Between the report of the All-India Rural Credit Survey Committee, the resolution of the National Development Council and its amplification by the Working Group on Co-operative Policy, the thoughts on the subject seem to be in a melting pot. The average Indian is left wondering as to what is good and what is bad in the sphere of agricultural co-operation.

It is desirable that the co-operative movement should rise from the peasantry and that it should be fully voluntary in character. It is equally laudable that the co-operative structure should be self-contained with regard to resources, leadership and management. But the basic conditions in agriculture and rural communities do not afford proper grounds for their achievement. It was in this context that a measure of supervision from above was thought essential in various co-operative institutions. We have started or converted about 6,000 large-sized co-operatives on the basis of the recommendations of the All-India Rural Credit Survey Committee. The large-sized co-operative has been more successful in

areas where cash crops predominate. Elsewhere the small-size village co-operative has indicated better recoveries and lower overdues. The training programme and the effort to equip the large-sized co-operative with efficient and experienced staff is on way and probably would show good results in course of time. It is, however, too early to say what these large-sized co-operatives would ultimately achieve. If some time had lapsed and a clear picture of their working would have been available, probably our ideas on them would have crystallized better.

In a country of continental dimensions, the few large-sized co-operatives with the new system of advancing loans in a sector which has insatiable credit needs would require a fairly long time to indicate clear trends. It is equally true that with the bulk of the agricultural sector on a subsistence level and the marketable surplus growing very slowly, and the peasantry not trained and accustomed to co-operative approach and, therefore, not capable of providing necessary leadership, a simple co-operative structure would be more appropriate. A complicated and variegated structure comprising of a variety of co-operative institutions specialising in various useful activities can take root only slowly as economic advancement and enlightenment come about. In this context, it is very difficult to appreciate the recommendation for the creation of a multiplicity of rural co-operative institutions specialising in a number of functions and co-ordinated with each other by a complicated procedure of administration and working.

It will be useful to examine the recommendations of the Team in the context of the above, and to find out how far it helps to clarify issues or usefully supplement ideas so as to bring about a feasible structure. The Team seems to be agreeing with the idea of a co-operative credit union covering a wider area than a village. It also favours a multi-purpose village co-operative. Thus on both these, it largely agrees with the resolution of the National Development Council. There are, however, a number of useful suggestions made by the Team to make the co-operative movement more effective and useful as well as to instill ideas about co-operative activities which might not have been hitherto fully understood. The Team, for instance, argues that co-operative institutions cannot be successful by magic. They can succeed only if they could perform economic functions better than they are now being performed. Thus it bids a good-bye to the popular belief largely ingrained among large sections of rural communities that co-operatives are by and large relief institutions. The Team has also suggested that the crop loan system is making headway very slowly. Besides, the credit available from the societies is not timely. Under both these counts, the Team suggests a radical approach to make the credit effective and timely. The lack of supervision over crop loans and the absence of link between productivity and production on the one hand and credit on the other to ensure repayment is also emphasised. To link production and adequate marketable surplus with the volume of credit, it is necessary to bring about a co-ordination so that both credit and surplus grow mutually and at a rapid rate. For this purpose, not only the management of the co-operatives but also the extension staff and in particular the technicians who advise and evolve plans for technological improvement in agriculture should operate in a co-ordinated way. If this happens, the nature and extent of credit would be linked up with its actual applicability and will be fully utilised with the objectives for which it was extended. It would thus not only promote

higher production but also go a long way in creating a machinery for expeditious, timely and adequate credit.

The Team also agrees with the procedure for linking credit with marketing, but adds that the co-operative structure in which marketing and credit are linked should also serve as an agency for price stabilisation on the lines discussed earlier. The details of this arrangement are not available but if properly worked, the system should normally ensure effective reasonable prices to the agriculturist. The need for storage and construction of godowns has also been emphasised. They have also laid emphasis on the co-operatives taking over the processing of agricultural produce and recommended starting rice mills on co-operative basis in major rice producing areas. They have even suggested that where possible, both the credit co-operatives as well as the marketing and multipurpose institutions should have certain minimum storage facilities of their own which they can utilise to the advantage of their members. The Team has also laid considerable emphasis on evolving non-official leadership. They have said that domination of co-operatives by the Government is not desirable.

It could thus be found that the Team has very largely corroborated the resolutions of the National Development Council. Of course, in some measure, they have offered suggestions for making the movement more useful and its working more effective. But their recommendations do not clear the uncertainties regarding the lines on which the co-operative movement should proceed to ensure a minimum measure of success.

Organisation

The Team indicates a number of economic, technological, organisational and structural changes which would help the country to reach the target of production. So far as the technological measures are concerned, one would not normally venture to express an opinion or attempt an analysis. It must, however, be said that particularly in this sphere probably our country has done little in comparison with what could be done and what has been done elsewhere in the world, and therefore, those practical suggestions should receive very serious thought and attention. In the sphere of community development also, the Team has rightly pointed out that the Community Development and Rural Extension have so far remained a generalised statement of aspirations rather than a programme and sooner it is translated into concrete activities, better it would be for agriculture of the country. They have also pointed out the respective roles of the village level worker, the Block Development Officer, the technician who advises the administration and the respective roles of the State and Central Government in making these programmes a success. The Team has pointed out how the functions and energies of the workers at different levels have been put to wrong use and that their aptitude and abilities not channelled in the right direction. If readjustments are carefully made with regard to the functions and the jurisdiction, the work would not probably suffer and we may not remain doubtful regarding the effectiveness or otherwise of the various agencies connected with rural development. In the matter of organisational lacunae which have been indicated by the Team in a number of spheres, they appear to be putting their finger on the right spot. It has been largely accepted that our planning, particularly the Second

Plan has not been very effective due to organisational weaknesses. If the organisation has been soundly conceived and properly effected, probably both in the matter of expenditure and targets, we would have been able to do much better than what we have actually achieved.

Livestock

Of all the valuable suggestions the Team has proffered, the one on the cattle problem should have an undivided appeal. On the basis of the available statistics of cattle population of 203 million of which 155 million are cattle and 48 million buffaloes, India possesses one-fourth of the world's cattle population required for dairying. Denmark has the densest cattle population in the World and India is only next to her in the matter of livestock density. The cattle population is far in excess of the available fodder and feeds. From this point of view perhaps about half the cattle are surplus. This situation is accentuated by a continuous substantial annual increase in cattle numbers. This excess of cattle population in relation to the supplies and the loss that they inflict on the country's rural economy are vividly brought out by the Team through an interesting analysis. It is suggested that the production of organic manure suffers both in quality and quantity as a result of the excessive number. Every unwanted animal eliminated would, through economies in maintenance, ensure an additional production of 365 lbs. of milk annually. The Team suggests that if an economy could be effected in the use of fodder and feeds by eliminating the useless and surplus animals and putting in the supplies so saved to feed the remaining cattle wealth, we would be able to increase the production of milk and milk products by Rs. 70 crores annually. This would mean significant improvement in the nutrition of the Indian child.

The Team looks with disfavour the efforts of a number of State Governments to impose a ban on cattle slaughter. They feel that it is neither judicious nor practical. They also feel that unless the approach to cattle slaughter is properly revised, it will not ensure the economic utilisation of cattle. This in its turn would impede the promotion of sound animal husbandry industry ancillary to agriculture and impede in consequence the resultant contribution by this subsidiary to increase food production.

The Team is conscious of the deep religious feeling and the sentiments against cow slaughter and also appreciates India's political and socio-religious system while making the above suggestions. It is for these reasons that the Team has some ingenuous suggestions to offer to eliminate surplus cattle without in any way directly affecting the deep-rooted sentiments. They suggest a graduated tax on cattle which would make the maintenance of useless cattle a burden on the owners. The other recommendations relate to measures by which the multiplication of cattle is severally restricted so that only a good breeding programme would ultimately emerge. Finally, they suggest control on open grazing which is both detrimental to good animal husbandry and breeding programme and to the production and use of fodder and feeds. The other measures relate to the economic utilisation of fallen carcasses and the use of animal by-products for various industrial and agricultural purposes.

These appear to be soundly conceived and if introduced would not only lead to the elimination of unwanted cattle but also to a sound animal husbandry industry in the country. Probably, of all the recommendations contained in the Team's report, those relating to the cattle of the country appear to be simple and easily enforceable. If they could be pursued, the solution of the cattle problem would significantly add to food production as well as to the nutritional standards of the population, particularly the younger section.
