



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

K. William Easter

*For Restricted Circulation
to Seminar Participants only*

BACKGROUND PAPERS FOR DISCUSSION

AT

THE INTERNATIONAL SEMINAR

ON

**“COMPARATIVE EXPERIENCE OF AGRICULTURAL
DEVELOPMENT IN DEVELOPING COUNTRIES
SINCE WORLD WAR II”**

NEW DELHI

25th, 26th, 27th and 28th OCTOBER. 1971

THE INDIAN SOCIETY OF AGRICULTURAL ECONOMICS
46-48, Esplanade Mansions, Mahatma Gandhi Road, Fort,
BOMBAY-I.

SMALL FARMERS DEVELOPMENT AGENCYOutline of a Programme of Action

B. Venkatappiah*

The role of the small farmer in the country's developing economy has assumed an importance which is as great as it is pressing. I welcome the opportunity of piecing together, however cursorily, some of the data and thinking available on this subject and of placing it before you for your consideration as a distinguished body of experts. More specifically, and in terms of concrete action, I shall deal with the origin, formulation and progress of the Small Farmers Development Agency. I hope to be able to share with you some of the experiences gained in the establishment and initial operation of a programme which today happens to be the largest single series of concerted measures contemplated in the Plan for promoting the economic development of small farmers and other under-privileged classes of the rural economy.

In tracing the origin of the Small Farmers Development Agency, I should like to go back to the "Approach to the Fourth Plan" (November 1968), which laid special emphasis on the importance of the small farmer and his economy in any framework of objectives for the development of agriculture. I quote from the "Approach":-

- - - - -

* Extract. Text of an address to the Indian Society of Agricultural Economics at its Twenty-ninth annual conference on December 30, 1969 in Waltair. Sections dealing with Land Records, Trained and Expert Personnel, Taiwan Experiment, Puebla Project in Mexico and Inter-Disciplinary Approach have been dropped.

"In the agricultural sector, the main endeavour has to be two-fold: first, to provide the conditions necessary for a sustained increase of about 5 per cent per annum, over the next decade, in agricultural production; and second, to enable as large a section of the rural population as possible--including the small cultivator, the farmer in dry areas and the landless labourer--to participate in development and share its benefits.

* * *

It is also necessary to pay increasing attention to the problems of non-irrigated areas, particularly those in which rainfall is negligible or uneven, and of the small farmer. These will entail evolving, through research, a series of programmes and practices which are likely to yield a significant increase in agricultural production in the dry areas as well as indicate measures of direct benefit to the small farmer. In the irrigated areas or those with assured rainfall, the small farmer should be encouraged to use the high-yielding varieties of seed and other modern agronomic practices which maximise yields and, to this end, positive steps should be taken to ensure that he gets the necessary inputs,--water, seed, fertiliser, credit, etc.--on time and that arrangements for marketing and processing of his produce are available. He must be positively encouraged to move away from subsistence farming and to have a commercial approach to agriculture through maximising production in whatever crops provide the best return.

Economic Base

In dry areas, there has as yet been no major breakthrough in research. It is essential that research

is supported through adequate funds and personnel to find solutions to the problems of such areas. The small farmer in these areas is extremely hard-pressed and can, at best, supplement his income by ancillary means, such as animal husbandry. The plan should enable him to do so. Public investment and assistance are chiefly needed for adapting modern technology to provide an economic base for the activities of the small farmer and to build the superstructure needed to make small-scale operation viable.

While agricultural development will provide opportunities to farm labour for fuller and more remunerative employment, it will be necessary to devise programmes for supplementing their income. This may take a variety of forms such as keeping milch-cattle, poultry raising and pig breeding. For the success of these ancillary activities, it will be necessary to provide adequate credit and organise marketing facilities.

*

*

*

For the small farmer, it will be necessary to make special arrangements both for institutional credit and State assistance. The investments on tubewells and other minor irrigation facilities may have to come from the State either directly or in the form of loans. Further, the small farmer would have to be provided with a larger amount of institutional credit than at present; such credit would represent a higher proportion of his individual requirements than in the case of the large farmer".

Twin Objectives

After this preamble in regard to the twin objectives of achieving a higher growth rate in agriculture and ensuring

a fairer distribution of the processes and benefits of such growth, it would be convenient to set out a certain amount of background data from various sources, including the Census of 1961, the All India Debt and Investment Survey, also of 1961, and the different rounds of the National Sample Survey. All these throw light on the situation of small farmers in terms of numerical strength, size of holdings and comparative position of different categories of holdings in respect of farm business, financial inputs and household transactions. I shall refer only to a few of these in the barest summary.

At the outset, it may be noted that the definition of the term "small farmer" poses several problems of methodology, even though the small farmer himself can be fairly easily identified for practical purposes. One might perhaps start by using the categorization adopted by the All India Rural Credit Review Committee (1969) whose report was published a few months ago. This Committee refused to adopt 'large', 'medium' and 'small' as mutually exclusive terms and classified the farmers into three categories ("medium to large", "small to medium", and "very small to small") on the basis of land holdings as reported in the Census: Category I (7.5 acres and above), Category II (2.5 to 7.5 acres) and Category III (less than 2.5 acres). The proportion of farmers belonging to Category III ("very small to small") was 34.5 per cent for the country as a whole, while that of farmers belonging to Categories I and II was 28.4 and 37.1 per cent respectively. In fact, about 11 per cent of the farmers had holdings of less than 1 acre. The proportion of holders of Category III was largest in Kerala at 80.5 per cent, followed by Bihar, Tamil Nadu and West Bengal, where nearly one-half of the households

belonged to this category. The other States in which the proportion was significant were Jammu and Kashmir, U.P., Orissa, Andhra Pradesh and Assam. Nearly two-thirds of small farm holdings in the country were to be found in Kerala, Bihar, Tamil Nadu, West Bengal and Andhra Pradesh.

Operational Holdings

The National Sample Survey gives data State-wise. Of about 49 million operational holdings in the country, a little over 40 per cent were less than 2.5 acres in size (Category III). One-third of the total were of Category II. The balance of about one-fourth were of Category I. An idea of the inequality of distribution of the cultivated land can be had from the area occupied by operational holdings of different sizes. Category III was numerically large, but accounted for only a small proportion of the cultivated area. Thus the farmer households with holdings of less than 2.5 acres formed 34.5 per cent of the total number of households and accounted for 40.7 per cent of the holdings, but their share in the cultivated area was only 6.8 per cent. On the other hand those with holdings of 7.5 acres and above, though only 28.4 per cent of the total cultivator households, accounted for 70 per cent of the area.

The All India Rural Debt and Investment Survey throws some light on the financial inputs and transactions of small farmers. The survey classified the farmers into 3 groups, namely, those with assets of less than Rs 2,500, those with assets of Rs 2,500 to Rs 20,000 and those with assets above Rs 20,000. The principal findings of this survey are:- (1) there was not much difference between one asset group and another in regard to indebtedness per

cultivated acre or proportion of indebted households; (ii) the proportion of households reporting indebtedness to co-operatives was only 5.1 per cent for the lowest group, but 14.7 per cent for the middle group and 22.6 per cent for the highest group. Similarly, the proportion of the amount outstanding to cooperatives to total indebtedness was only 4.2 per cent for the lowest group while it was 14.3 per cent for the highest group; (iii) the receipts from sale of crops, fodder etc. amounted to only Rs 69.3 per household for the lowest group, but it was as much as Rs 1,796 for the highest group; (iv) the receipts of the small cultivator from sources other than the crop were largely by way of wages accounting for about 82 per cent of the total earnings, whereas it was 31.4 per cent for the highest group. The highest group could earn 19.1 per cent of their total receipts from industries and 24.8 per cent from trade. The data on capital expenditure in farm business revealed the uneconomic position of small farmers. The proportion of households reporting such expenditure was as large as 85 per cent among the highest group whereas it was only 39.6 per cent for the lowest group. Again the average amount for reporting household was Rs 716 for the highest group as compared to Rs 84 for the lowest group.

The individual studies on small farmers show that, while their handicaps differ from area to area, the major disadvantages are: fragmentation of holdings, insecurity of tenure, inadequate and untimely supply of inputs including water, lack of credit facilities and unsatisfactory arrangements for marketing and storage. The studies also show that, with support from irrigation, the new technological development makes it perfectly possible for even a small farm of, say, 3 to 5 acres to be converted into a viable unit.

Socio-Economic Implications

The data on small holdings go to show that the total area involved, even if small in relation to the large number of small farmers, is both sizeable and significant from the point of view of agricultural production. The participation of small farmers in agricultural programmes based on the new technology is essential both for this reason and because of the far reaching socio-economic implications of leaving this large section of the cultivating population out of the ambit of the new agricultural strategy. Moreover there is reason to believe from these and other studies that the productivity of small farmers is not inferior to that of large farmers operating in similar conditions. There is ample evidence that the small farmers are not less progressive than the large farmers.

I will now refer, purely by way of illustration and very briefly, to the studies pertaining to (1) the Kosi area of Bihar, and (2) certain regions of Andhra Pradesh. These are only a couple of studies picked out from the many made in this context. I believe that arrangements are in train for publishing most of these studies under the auspices of your own Association in the near future.

Farmers in Kosi Area

The study of small farmers in the Kosi area of Bihar was conducted in the districts of Purnea and Saharsa. The survey was intended, among other things, (i) to assess the minimum size of a viable farm, (ii) to ascertain the factors which retard the adoption of the new technology by small farmers, and (iii) to identify measures, including

those pertaining to credit, water, fertiliser and other inputs, for promoting the adoption of the new technology by small farmers. The investigation was in the nature of a case study. A broad conclusion was that 2.5 acres of irrigated land would be the minimum size of a viable holding. Holdings below 2.5 acres cannot be made viable while those above 5 acres can reasonably be expected to take advantage of the existing credit and other facilities without the need to make special arrangements. At the same time, farmers with holdings between 2.5 acres to 5 acres require special assistance if they are to be helped to increase their production. Where the holdings are below 2.5 acres, the farmers cannot be rendered viable on their land base, alone, however much they may be assisted by irrigation and the new technology; they should be provided with subsidiary occupations and encouraged to take up horticulture, dairying, poultry keeping and cottage and small scale industries.

An interesting development was revealed by the study. The 1961 census showed that at the time 9.64 per cent of the households had holdings below one acre; the present survey indicated that in 1968 the percentage was reduced to 0.9 in Purnea. This trend was evident in the Saharsa district also; between 1961 and 1968, the percentage of households cultivating less than 2.5 acres was reduced from 33.89 to 25.37. Among other things, the process appears to have been accelerated by the two successive droughts of 1965 and 1966.

The case study confirms that share-croppers are treated as tenants-at-will. The landlords do not allow the share-croppers to cultivate the same land from year to year for fear that they might lay claim to the land.

Agreements with share-croppers are invariably oral and even rent receipts are not given. In irrigated areas, the land-owner generally gets the irrigated land cultivated by members of his family or by hired labour and allocates unirrigated or less fertile lands to the share-croppers. Big cultivators who have large areas of irrigated land have no option but to get part of the irrigated land cultivated by share-croppers. In such cases also, the land-owners generally change the share-croppers every year. The harvested crop is kept mostly in the 'khalihan' of the land-owner till the division of the produce.

Though according to law the land-owner is entitled to one-fourth of the produce, in actual practice it is equally divided between the land-owner and the share-cropper. In a few cases, the share-croppers who were recorded as under-raiyats in the last survey and settlement operations in the district of Purnea have been dispossessed on paper either through ex parte title suits or rent suits, though they continue to cultivate the land and divide the produce on a 50 : 50 basis. The share-croppers who have been examined have invariably stated that the insecurity of their tenure is the biggest handicap in the way of their adopting the new technology. The study reveals that barely five per cent of the share-croppers have used high-yielding varieties of seeds, fertilisers and insecticides. The majority of the land-owners do not share the additional expenditure on irrigation, seeds, fertilisers and inputs.

As regards credit, the study showed that the Government and the cooperatives contributed 22.3 per cent of the total credit requirements of farmers, both large and small, in the district of Purnea and 30.2 per cent in Saharsa, while the moneylenders were responsible for 62.7

per cent of the credit in Purnea and for 60.7 per cent in Saharsa. So far as small farmers were concerned, the co-operatives and Government between them hardly contributed 10 to 15 per cent of the credit requirements .

Another problem was minor irrigation. As many as 70 per cent of the farmers in Saharsa district and 75 per cent in Purnea district complained that inadequate irrigation facilities stood in the way of increasing production. The small farmers could not take advantage of a scheme for the construction of tubewells launched by the Agricultural Refinance Corporation as they were not able to furnish adequate security. Also, unless they combine with the neighbouring farms, the small size of holdings makes tubewells an uneconomic proposition. One of the biggest handicaps was the fragmentation of holdings. As many as 82 per cent of the farmers in Saharsa district and 73 per cent in Purnea mentioned small size and fragmentation of holdings as a major impediment to development.

Investigation in Andhra Pradesh

In the investigation of the small farmer problem in Andhra Pradesh, the districts were classified into three categories based on the gross value of product per acre and per worker. In this scale, the districts of East Godavari, West Godavari, Krishna, Guntur and Nizamabad are at a high level; Visakhapatnam, Srikakulam, Chittoor and Kurnool at an intermediate level; and all other districts at a low level. The districts in the first group are canal-irrigated and predominantly rice-growing. The first three in the second group depend for irrigation mainly upon unreliable sources of water supply like tanks and hill streams.

Crop intensity is high. Demographic pressures are severe. The last district in the second group, i.e. Kurnool, is similar in farm economy to the districts in the third group. But low demographic pressure has given it an advantage over districts in third group. In this district though gross value of product per acre is low, gross value per agricultural worker is high. The last group of districts, mostly located in Rayalaseema and Telangana, are liable to severe drought conditions. They are predominantly dry and millet growing. Severe fluctuations in yields disrupt the farm economy. Economic and social overheads are less developed.

The study has revealed that yields, crop-wise, are significantly lower in the two lower groups as compared with the first group of districts. The most important contributory factor to variation in the gross values is the perceptible difference in the cropping pattern. The districts in the first group allocate a major portion of the area to crops yielding high values per acre. This is made possible by assured water supply provided by canal irrigation.

Examination of yields crop-wise for recent years revealed that, while the districts in the first group showed evidence of rise, others appeared to stagnate. Gross value of product in real terms also revealed a similar picture.

Numerically, small farmers as expressed in terms of holdings yielding a gross value of less than Rs 2,400 per annum are in a majority in all the districts. Most of the small farms yield less than Rs 800 gross value.

There is a high degree of tenancy among small farmers in rich districts, but the character of tenancy has changed in recent years. Most of it is share-cropping. The land owner sometimes takes up the function of providing the non-traditional inputs. In some areas, where the big owner has emerged as an entrepreneur, he is displacing the small owner by leasing in his land.

Another interesting conclusion of the study is that, in the rich districts, the area under the small farmers is inadequate as a land base. The case study on "Transition to I.R. 8" in three villages in West Godavari district suggests the directions in which institutional support could help the small farmers to make better adaptation. Non-availability of working capital at reasonable rates of interest, lack of special attention to the development of skills in using non-traditional inputs and inaccessibility of plant protection equipment discourage the shift to high yielding varieties. The case study of two villages in Visakhapatnam district suggests that the position is similar even in rich areas in poor districts. In rich districts, cooperative institutions could be geared to the benefit of the small farmers with appropriate changes in the procedures and better implementation of the existing facilities available to the small farmers within the cooperative framework.

The case studies also reveal a wide range of adjustments that the small farmer is making in response to the changes in the agricultural economy. There is increasing reliance on dairying, but institutional support is needed to put dairying on a stable footing.

The case study on the shift to commercialisation in a tobacco region has shown that the degree of response

of small farmers does not vary from that of the bigger ones.

Varying Environments

I have given no more than a very small cross section of the studies and findings which, in the course of 1968, made it possible to consider the situation of the small farmer, not in broad and generalised terms, but with specific reference to particular geographical areas and socio-economic environments. The areas differed widely from one another in point of soil, climate and other conditions. The environments varied greatly in many ways, not least in the degree of development of the infra-structure--credit, marketing, communications and so on--which ranged from "highly advanced" in some States to "hardly existent" in other parts of the country. By a fortunate arrangement, it was not only possible to ensure that the studies were considered simultaneously by the Planning Commission and the All India Rural Credit Review Committee, but to effect very close liaison between the thinking of the Committee and the Commission. The Committee conceived the idea of a Small Farmers Development Agency and put it forward in some detail, first tentatively and informally in November, 1968, then formally and by means of an Interim Report early in February, 1969. The Commission concurrently took up and processed the idea, reduced the suggested number of projects from 30 to 20 to accord with resources, and incorporated the scheme as a whole in the Draft of the Fourth Five Year Plan brought out in March 1969.

Since I have already drawn attention to the underlying general considerations by means of a quotation from the "Approach", it would be useful if I referred at this stage to the translation of those ideas into the beginnings

of a concrete scheme. I shall do so by reproducing two brief paragraphs in which the Draft Plan sets out the measures proposed in respect of small farmers and their problems:-

"One of the main objectives in the agricultural sector is to enable the small farmers to participate in development and share its benefits. This is sought to be achieved by various measures, both general and specific. The general measures, which extend to the country as a whole, are complementary in character and pertain to a number of spheres including minor irrigation, agricultural credit and animal husbandry. A large amount of public investment is proposed for community works such as tanks and tubewells of benefit to small farmers who would not be able individually to provide themselves with these facilities. Such minor irrigation works may be constructed by the State Governments, panchayati raj institutions or other appropriate authorities. As regards agricultural credit, it is proposed to take a number of steps for reorienting the general loaning policies and procedures of cooperative institutions in favour of the small farmers. It is also envisaged that the Agricultural Refinance Corporation will provide assistance for schemes on an area basis designed to enable the small farmers as well to take advantage of agricultural, dairying, poultry and other programmes.

The second direction of effort will be pilot experiments in about 20 selected districts. It is contemplated that a Small Farmers Development Agency will be set up in each of these districts. In order to provide a continuity of finance and, to the required extent, a common basis for these experimental projects, the pilot

scheme has been included in the Central sector of the Plan. The principal function of the agency will be to identify the problems of small but potentially viable farmers in its area and help to ensure the availability of inputs, services and credit. To the maximum extent possible, this will be sought to be done through the existing institutions--public, cooperative and private--as also local authorities such as Zila Parishads. The agency may give assistance to small farmers in respect of other services, such as land levelling, machinery and marketing. Wherever necessary the agency may itself undertake creation of irrigation facilities and custom service for the benefit of the small farmers. With a view to stimulating the flow of cooperative credit to such cultivators, it will provide grants to the central cooperative bank, the agricultural credit societies and the cooperative land development bank in the area as an incentive for financing such farmers and to help them build up special funds for covering the risk apprehended in such financing. In addition, the agency will provide a subsidy to these institutions for strengthening their managerial and supervisory staff for this purpose. It will also draw up model plans for investment and production activities to be undertaken by small farmers operating under different sets of conditions. The experience gained in these districts will enable the formulation of more comprehensive plans for general adoption."

Small Farmers' Projects

In what follows I shall first of all attempt brief general description of the scheme as it has further evolved from the formulation of the Draft Fourth Plan. I shall then give two concrete illustrations--Purnea and Darjeeling--

of small farmers' projects already established. I shall try and identify, in the light of comments and experience, what appear to be some of the lacunae and inadequacies of the present scheme and, consequently, the directions in which it might be modified, expanded and improved. To help in identification of other issues I shall also briefly refer to analogous experience outside India: more specifically to the Taiwan experiment and to the Puebla project. Lastly, against this background, I shall pose for your consideration a few of the problems to which answers will soon have to be found.

The first point to note about the Small Farmers Development Agency is that, for the time being, it is focussed on that class of cultivator who has been broadly described as the "potentially viable small farmer". In other words, he is the class of farmer who, with the help of the new technology, can manage to be a surplus producer; he has just enough land to enable him to be so; what he needs is special assistance for obtaining the requisite inputs, including credit, for without these he cannot make use of the new technology.

Potentially Viable Farmers

It follows that, in establishing small farmers' projects in different areas, a preliminary condition is that there should be a substantial number of potentially viable small farmers in the selected area. Other desiderata are an infra-structure of credit, marketing, etc., which is at least fairly satisfactory, and a production potential based on the existence of ground water or surface water or both which can be mobilised for irrigation. Given these conditions, appropriate schemes have to be drawn up with

reference to local resources and requirements so that the small cultivators can undertake specific lines of investment, adopt suitable patterns and use modern inputs. The task of the agency would then be to identify the special problems of the small farmers as producers, devise programmes by which their farm economies could be made viable, and in due course undertake evaluation and review of the programmes. In discharging these functions, it is expected that the agency will make the fullest use of the existing institutions and departments and not create any significant staff of its own. One of the major tasks of the agency will be to arrange for credit either from cooperative or from commercial banks.

As a means of inducement to the cooperatives, the agency under-writes a certain proportion of the additional loans to small farmers in pursuance of the scheme and makes the amount available as an out-right grant towards the building up of a risk fund. The agency will also provide assistance to cooperative institutions for supervising the use of credit. It is expected that in the context of this planned effort for the benefit of small farmers under the direct supervision of an influential agency, the commercial banks will shed their hesitation in financing this class of producer. The State Bank of India has already come forward to support the programme in all the areas where the small farmers agency will be set up. It remains to add that the agency has the legal status of a registered society so that it can receive funds direct without burdening the State budget. Though the funds are from the Centre, the composition of the agency is such that the scheme is for all practical purposes operated by the State. The Chairman of the agency is the Collector of the district or the Development Commissioner or similar development authority of

the particular area.

In addition, the board of the agency would usually include the District Officers of the Agriculture and Animal Husbandry Departments of the State. The head or heads of the local cooperative institutions (Central Cooperative Bank and Land Development Bank), together with two representatives of the Centre (one from the Planning Commission and the other from the Ministry of Agriculture) are practically the only other members of the compact body which constitutes the Small Farmers Development Agency. The amount placed at its disposal is roughly Rs 1½ crores for a period of five years. This is additive to, and under no circumstances in replacement of, the State Governments' own provisions for the area in its Plan or its budget. A further and substantial addition is the long, medium and short-term institutional credit planned for and arranged in support of the project. This, in certain instances, may be as much as five to six times the nucleus provision of Rs 1½ crores. The Planning Commission and the Ministry of Agriculture have had a series of discussions with the State Governments in regard to the establishment of small farmers development projects on these lines. Two schemes have already been approved-- one for Purnea and the other for Darjeeling.

Programmes are under preparation for different areas in other States: for example, South Arcot in Tamil Nadu; Srikakulam, Nalgonda and Cuddappah in Andhra Pradesh; Bidar and Mysore in Mysore State; Quilon district in Kerala; Chindwara in Madhya Pradesh, Sabarkanta in Gujarat; and Ratnagiri, Yeotmal and Nanded districts in Maharashtra. In some of these instances, only parts of districts are covered. Further, in certain States, the provisions of Rs 1½ crores has been split between 2 or 3 smaller projects

in different regions of the State, so that the experiment may be more evenly spread.

Purnea Project

I shall now proceed to give some details of the Purnea project. The total number of cultivating families in the district is 4 lakhs. Those with holdings between 2.5 and 5 acres are about a lakh. In the Pilot Project only 50,000 farmers will be covered in the two Sub-divisions of Purnea Sadar and Araria.

The area is served by a network of good roads. With the completion of the Farraka Barrage, it will be connected by road with Calcutta. The area is also well connected with important centres like Katihar and Barauni. Markets are developing fast in the irrigated zone. Under an Area Development Scheme, market yards and rural roads are being constructed. The cooperative infrastructure is not strong, but with proper administrative arrangements, it may be possible for the organization to meet a sizable portion of the requirements of credit. The State Bank of India has opened a Development Office in Purnea and embarked on agricultural financing. The Agro-industries Corporation is setting up a servicing unit.

(a) Consolidation of holdings : About 8 lakh acres of cultivated area and 6 lakh acres of non-cultivated land in the two sub-divisions will require consolidation. The State Government is giving priority to this work and setting apart sufficient funds from its Plan provision for completing the operations. The cost will be recovered from the farmers in suitable instalments.

(b) Irrigation: Attempts will be made to enable groups of small farmers to sink 4" tubewells. In suitable cases 2½" tubewells will also be sunk. Provision has also been made for sinking 1½" tubewells operated by hand or by electricity. About 40,000 acres are expected to be brought under irrigation. The total outlay involved is Rs 3.43 crores. This will come from loans provided partly by the Land Development Bank and partly by the commercial banks. Farmers sinking 1½" tubewells will be given 25% of the cost as subsidy.

(c) Credit for inputs: Short-term credit to the extent of about Rs 3.3 crores is likely to be required during 1973-74 for all the small farmers covered by the Intensive Agricultural Programme. It is estimated that the Cooperative Bank, which will be adequately strengthened, will be able to provide about a crore of rupees. The balance will come from commercial banks. The Cooperative Bank and societies will be given an incentive grant by the Small Farmers Development Agency. To supervise the use of credit, the Cooperative Bank will appoint an adequate number of supervisors. A part of the cost will be financed from the normal Plan provisions of the State Government, while a part will be met by the Agency. In regard to medium credit for purchase of bullocks, it has been agreed that the Central Cooperative Bank and the commercial banks will share the loans.

(d) Problems of share-croppers: Share-croppers whose inputs have not been recorded will find it difficult to get cooperative or commercial bank credit. As a first step, it is proposed that the State Government will give taccavi loans direct to groups of cultivators on the basis of a

joint bond. The idea is that if such small farmers are financed by the Government initially and loans are repaid by them in time, their credit worthiness will increase in the subsequent seasons and cooperatives and commercial banks may come forward to finance them.

(e) Land levelling: A large part of the area requires levelling and development. It would be difficult for the small farmers to pay the normal cost for levelling and reclamation. They will be subsidised to the extent of 50% of the cost by the Agency. The remaining 50% will be arranged as a loan from the Land Development Bank.

(f) Subsidiary occupations: Small farmers will be encouraged to take up subsidiary occupations, including dairy and poultry programmes. Loans will be advanced for the purchase of high yielding milch animals. Technical inputs like artificial insemination, supply of concentrate feed and fodder, and veterinary aid will be provided. There will be an organised milk procurement programme through milk cooperative societies. The milk will be processed in a dairy run by the Cooperative Milk Union. Milk is expected to be marketed to Katihar and Purnea.

About 1,000 small farmers are expected to be covered by the programme of poultry development. Loans will be arranged through the cooperatives. Balanced poultry feed will be supplied by the Bihar State Agro-Industries Development Corporation or other agencies like Vyapar Mandals.

(g) Storage, Marketing and Communication: A scheme for storage of foodgrains will be operated in the district, under which small farmers will be enabled to obtain loans

for putting up small Pusa Bins. The Cooperative Marketing Societies will be strengthened with Government share capital. The development of rural roads is being taken up under a separate Central Sector Scheme.

(h) Execution: The scheme will be executed by the Small Farmers Development Agency of which the Kosi Area Development Commissioner is Chairman.

Darjeeling Project

I now turn to the Darjeeling project. This district consists of four sub-divisions--Siliguri of the plains and Darjeeling, Kalimpong and Kurseong of the hills. The project covers only the hill Sub-divisions, the population of which is about 4 lakhs. Out of this, the number of agricultural workers is about 73,000 including about 68,000 cultivators (about 8,000 families). Scheduled Castes and Tribes constitute a large section of the farming population. Of about 8,000 cultivating households, roughly 6,500 have holdings below 5 acres. Those with holdings of less than one acre constitute 48% of the total cultivating households.

On account of the inadequate income from their present low levels of production, small farmers have to look to non-agricultural occupations for opportunities of earning supplementary income. These opportunities are, however, limited. The cost of production in the hills is generally higher than in the plains. The cost of living also is comparatively high.

A favourable feature, however, is that the agro-climatic conditions of the hill area are favourable for the development of horticulture and livestock. Ready markets

are provided to some extent by Darjeeling, Kurseong and Kalimpong in the hills and more importantly by Siliguri on the plains at the foot of the hills. Within a measurable time, once the Farraka route is established, Calcutta itself may be an important market for milk and livestock products, as it already is for vegetables and fruits.

The programmes under agriculture will include development of irrigation facilities by training hill-springs, construction of new bench terraces on hill slopes, establishment of orchards, provision of plant protection equipment, supply of fertiliser and liming material, development of dairy, poultry and piggeries and strengthening of the infra-structure of credit, marketing and transport. Loans required for the various programmes will be arranged through financial institutions including commercial banks and the Land Development Bank. The State Bank of India has already three branches in the area and is ready to open more. The Land Development Bank is establishing a branch. The Central Cooperative Bank, however, is too weak to enter the picture at this stage. There will be a programme for strengthening it financially and operationally.

Small farmers whose holdings are below a certain limit, say 3 acres, are proposed to be subsidized in respect of such items as land levelling, minor irrigation and the price for fertiliser.

In regard to animal husbandry, existing facilities cannot adequately take care of the requirements. Consequently, some of the requisite infra-structure, etc. artificial insemination centres, will have to be created out of the fund set apart for the project. Development of

small agro-based industries, like vegetable processing, silk rearing etc., will receive priority for the benefit of small farmers in the hill areas. These will provide a source of subsidiary income.

The provision for the different programmes is roughly as follows:

(a) Agriculture and minor irrigation	: Rs 68 lakhs
(b) Animal Husbandry	: Rs 50 lakhs
(c) Agro-based industries	: Rs 17 lakhs
(d) Other Programmes	: Rs 8 lakhs
(e) Administrative expenses	: Rs 7 lakhs

I have alluded to the fact that a large number of other schemes are either under consideration or in different stages of preparation. Some of these projects are in Andhra Pradesh, Mysore, Kerala, Maharashtra, Gujarat and Madhya Pradesh. Other States are also likely to participate in the very near future. It would be useful if I refer to the experience so far gained at the stages of formulation or establishment of the projects and list some of the points which have emerged from discussions:-

(1) The number of projects envisaged--twenty for the whole of India--is obviously inadequate. Most of the States have asked for three, or at least two, projects being established in their jurisdiction. Some have provided additional funds in order to increase the number; others have divided the provision of Rs 1½ crores between two or more projects in different parts of the State. All are agreed that, even as a start, the areas of intensive effort for the benefit of the small farmer must be much larger in number and coverage than has been provided in

the Draft Plan.

(2) Another important modification suggested is the extension of the underlying idea of the scheme to the very small farmer--who may or may not be potentially viable in terms of his land base--as also to the agricultural labourer. The application of the idea to this important category--farm labourer and non-viable farmer--may take one or two forms. There may be independent projects confined to this category alone. Alternatively, and preferably, the project may be dovetailed into that designed for the potentially viable small farmer and operate as a composite, even if separable, scheme for a defined geographical area. To illustrate, the Small Farmers Development Agency of a district may be put in funds and made organisationally responsible for two distinct parts of a scheme: Part A for potentially-viable farmers and Part B for those substantially dependent on agricultural wages or subsidiary occupations. Indeed, if the funds come from different sources, e.g., if Part A was financed by the Centre and Part B by the State, it should not be impracticable for the Small Farmers Development Agency to be made accountable to the Centre for Part A and to the State for Part B, while the scheme itself, in its entirety, would be a composite one for the whole community of small farmers and farm labourers in the area.

It may be mentioned that, much in advance of the all-India programme, a great deal of important work has been done in Maharashtra on to the problems of the agricultural labourer and the very small farmer. The Maharashtra scheme, which has been in operation for some time in selected blocks, bring an integrated approach to the problem and aims at increasing the productivity and employment of

small farmers and farm labourers in the particular area. Small holders have been defined with reference to land holding, revenue paid and total farm and non-farm income.

An agricultural labour family has been defined as one which derives 50 per cent or more of its income from agricultural wages. The programmes include intensive cultivation, establishment of small poultry and dairy units and, where feasible, agrobased industries. The programme in each district is coordinated by a Coordination Committee somewhat on the lines of the Small Farmers Development Agency, but without a legal status. At the State level there is a Review Committee. In some of the areas, the State Khadi and Village Industries Board is implementing the Intensive Area Development Scheme of the Khadi Commission. Recently the State Government has decided to introduce, on an experimental basis, a scheme of guaranteed employment to agricultural labour as part of the integrated area development scheme.

Qualitative Change

To sum up, the suggestion made is that, apart from quantitative expansion of the small farmers development projects envisaged in the Draft Plan, there should be a qualitative change in that the projects should be designed both for small farmers and for farm workers. The project might be a composite one where feasible and convenient, but where necessary there could also be entirely separate projects for the category of agricultural labourers and non-viable farmers, as distinguished from those for potentially viable farmers.

A third important point emerges from the experience so far gained. There are certain pre-requisites which are even more fundamental than, say, the infrastructure of credit, marketing, storage and communications. These have reference to tenants, sub-tenants and more especially share-croppers and are concerned with such basic requirements as the existence of land records and the implementation of land reforms. It is being increasingly borne in on those concerned with the formulation of these projects in different parts of India that, where the potential beneficiaries of land reforms are concerned, the Small Farmers Development Agency will be virtually inoperative in various sectors, including the important one of credit, unless a number of measures are first undertaken in the project area in regard to land records and land reforms .

Thus there are areas in which survey and settlement operations, and sometimes the revision of those operations, are in process of completion or are overdue, so that the basic documents relating to land rights are at the moment non-existent. There are other areas in which records of rights exist but in an incomplete form, a crucial omission being the names and rights of tenants. In still other areas, the records are nominally complete but, to put it quite simply, are "fudged" in elaborate and court-proof collusion between landlord, village officer and other authorities. Injustices are often apparent, but not the means of remedying them, because the whole weight of costly and cumbrous procedure, judicial and administrative, almost invariably throws itself against the under-privileged aspirant to promised benefits.