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# EXPERIENCE OF CO-OPERATIVE FARMING IN NASIK DISTRICT

## A Study of Four Co-operative Farming Societies\*

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### CO-OPERATIVE FARMING AND LAND UTILIZATION

The success of the scientific land utilization in agriculture in under-developed and over-populated economy like that of India revolves round the solution of two inter-connected problems: (i) that of increasing productivity per acre on land and (ii) that of providing opportunities of employment for the under-employed and unemployed labour force. Needless to emphasize that these issues are interdependent and in the long run cannot be dissociated from the development trends of the economy as a whole. Of late, the belief has been gaining ground that no amount of assistance, financial or otherwise can raise the productivity of uneconomic cultivators unless immediate attention is directed to the unit of operation. On account of the unit of operation being palpably small, the cultivator is rarely able to find full employment on it and cannot get out of it as that is the only means of keeping himself apparently gainfully occupied. It is these 'self employed' cultivators who man the army of disguised unemployed. But as long as other avenues of employment remain unexplored, the organization of co-operative farms will be like putting the cart before the horse. In the very process of their formation much labour will be displaced, for it would be uneconomic to organize co-operative farms to maintain the same number of persons. The assumption is that the method of land utilization must be modified with the alteration of the size of the farm, if the maximum advantage is to be derived from the change.

Whether we direct our efforts towards maximizing production on the existing farm units or towards the organization of co-operative farms, the formation of a strong co-operative base must be given a high priority and the success or the failure of the either effort will depend on the supplementary service co-operatives. The Second Plan's ideal is the co-operative village management—"a rural economic structure . . . . in which agricultural production, village industries, processing industries, marketing and rural trade are all organized as co-operative activities."<sup>1</sup> But during the transition period there will be in each village, an individual sector, a voluntary co-operative sector and a community sector for the land management. "The aim would be to enlarge the co-operative sector until the management of the entire land in the village becomes the co-operative responsibility of the community. Co-operation in all forms and in all activities is to be welcomed because the habit and outlook of co-operation is as important as the forms through which it is expressed."<sup>2</sup> Today the trend of thought seems to be in the direction of creating optimum size farms. 'The idea underlying this suggestion seems to be that there

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<sup>1</sup> Report on the Second Five-Year Plan, 1956, p. 207.

<sup>2</sup> *Ibid*, p. 206.

is a limit below which family farming, even with all co-operative aids ceases to be economic."<sup>3</sup> Theoretically, therefore, it is possible to make a case for co-operative farming—but as the Kumarappa Committee Report has pointed out 'no single uniform method of land utilization can meet the requirements of the situation—in view of the fact that the existing pattern of agricultural economy is very complex and the problems it has to face are variegated'.<sup>4</sup>

The publication of the Report of the Indian Delegation to China on Agrarian Co-operatives and the emphatic reaffirmation of faith in co-operative farming by Prime Minister Nehru at the Mussoorie Conference leave no doubt that Government mean business and the co-operative farms will get all the blessings of the policy makers. Though the report is favourably inclined towards the Chinese co-operatives, its faith in democracy and freedom can be seen in the suggestions thrown here and there regarding the procedure to be adopted. "We don't visualize any compulsion in bringing about the agrarian transformation on co-operative lines."<sup>5</sup> It is interesting to observe in this connection that in Bombay State "an element of compulsion can be imposed on the recalcitrant minority of owners of land when they refuse to join the society of this type . . . . . consented to by other owners in possession of lands included in the Scheme."<sup>6</sup> If the co-operative farms seem to be the only solution for the pressing problem of the rural economy why not be candid about it? Yet the Report concludes that "a transformation from family farming to co-operative farming is no easy task. In a country with a parliamentary form of Government it will be a much more gradual process than in communist countries . . . . . We are quite clear in our minds that at least during the next few years, by and large, family farming will continue to be the general pattern of cultivation. Service co-operatives for the provision of finance, supplies, marketing and processing will therefore have to play a very important role in the agrarian economy. While it will be necessary to intensify efforts for co-operative farming, at the same time it is equally important that there is no relaxation of efforts in the building up of the service co-operatives of all kinds."<sup>7</sup>

The present writer has studied four co-operative farms functioning in Nasik District mainly with a view to find out their role in the larger dimensions of economic growth. In this context the particular line of action suggested by the Report on Chinese Co-operatives has much relevance. "The object should be to have at least one co-operative farming society in every group of fifty villages by 1960-1961. . . In this connection we may mention that in most states some agricultural lands are available with the Government in which permanent rights have not accrued to individual peasants. We suggest that wherever a sizeable area is available, it should be settled with co-operatives consisting of landless agricultural workers for co-operative farming. Small owners should also be admitted to these co-operatives wherever they agree to pool their lands."<sup>8</sup> At a time when Indian agriculture is passing through a period of instability a partial solution will be no solution. It seems the tenancy legislations and land reform measures have changed

3. G. D. Patel : Agrarian Reforms in Bombay, 1956, p. 166.

4. Report of the Congress Agrarian Reforms Committee, New Delhi, 1949, p. 8.

5. Report of the Indian Delegation to China on Agrarian Co-operatives, New Delhi, 1957, p. 157.

6. Section 64(N), 64(O), 64(Q), Bombay Co-operative Society Bye-laws-Leaflets Q.Q. 1958.

7. Report of the Indian Delegation to China on Agrarian Co-operatives, 1957, p. 170.

8. *Ibid.*, p. 157.

the traditional composition of the power groups and somewhat enhanced the economic hold of a certain group of cultivators (mainly in irrigated area, where cash crops are cultivated). The rise in prices of foodgrains in no small measure may be attributed to the increase in the propensity to stock of this group of cultivators. One appreciates the liberal advances of credit to the farmers, but unless the accepted policy is geared to the ultimate end of the prosperity of the whole village, breakdowns will not only be the order of the day, but they will put back the clock of progress. The virtuous process of expansion can be generated through the sufficient and timely credit to small cultivators linked with production and the elimination of price fluctuations through the regulation of trading and the operation of buffer stocks. One is driven to the conclusion that no one of these measures can bear fruits in the absence of others and would on the contrary undermine the utility of the policy as a whole. Artificially propped up prices will prevent transfer of population from agriculture to other occupations, liberal advances of credit may encourage speculation and if note is taken of the backward rising supply curve in agriculture, productivity may not show any sign of improvement. A dynamic policy embracing the small and uneconomic farmers and landless labourers must be evolved to avoid the delay in the execution of the long term aims of the Plan, by the anti-social activities of those who stand to lose in the transitional period.

The success of the Chinese Producers' Co-operatives can be explained in the establishment of a fool proof credit system and assured market and prices. Similarly in Japan, though producers' co-operatives have not found favour, state assistance and service co-operatives, organization of warehouses, processing and grading of the produce, price support by the Government and easy availability of finance have gone a long way in raising the productivity and improving the efficiency of the farm business.<sup>9</sup> "The Japanese example also emphasizes the importance of the decentralized efforts of local authorities, of autonomous systems like the co-operatives and of semi-autonomous corporations in economic planning in a democracy."<sup>10</sup>

#### EXPERIMENTAL CO-OPERATIVE FARMS AND THEIR LESSONS

This unusually long discourse on the policy decision regarding co-operative farming as an operative technique may seem out of place, but it has a bearing on what is to follow. The study of the co-operative farming society in Nasik District was undertaken firstly, in order to see its potential merits, secondly to find out the difficulties if any, encountered in the process of management and operation and finally to know how far it would be possible to introduce co-operative farms in the wake of psychological resistance and antagonism of large farmers, if force and coercion are not to be used.

Of the four co-operative farming societies studied, three are Co-operative Collective Farming Societies, and the fourth is the Co-operative Tenant Farming Society. Of these, the Tenant Farming Society and another Collective Farming Society are located in the village Kothura. In all, three societies are from one

9. "Some Aspects of the Japanese Economy : The Lesson for India," By Prof. D. R. Gadgil, *The Economic Weekly*, 6th July, 1957.

10. *Ibid.*, p. 884.

taluka, Niphad and one is situated in Dindori taluka. The Niphad Taluka has a predominance of money crops, like sugarcane and onions, and has a considerable acreage under irrigation. It may be noted that onions have a large foreign market which has made the taluka a centre of trade and marketing. The cultivators of the area are hard working and skilled and their economic conditions is tolerably good. The farmers have taken to bunding with zest and one notices cultivators busy in bunding their fields prior to the onset of monsoon.

#### SAVARGAON AND AMBEGAON CO-OPERATIVE COLLECTIVE FARMING SOCIETIES

These two societies have been grouped together because (i) the members of the societies are landless labourers mainly of backward classes, (ii) the land is Government waste land (*jirayat*), (iii) both societies are co-operative collective farming societies and are located in the two talukas—Naphad and Dindori, respectively, (iv) in both the societies wages are paid in kind and (v) both are without any facility for water supply. However, there are certain factors which have made the Savargaon society fare better and the Ambegaon society to stagnate.

The Savargaon collective farming society is situated about four miles from the village Savargaon in Niphad taluka. It has 250 acres of land out of which approximately 150 acres are under *bagayat* and double crop cultivation. Water from a running stream is diverted and utilised for the *bagayat* cultivation. At the inception of the society, there were 25 members of whom now only 16 are left. The society has enough work to keep the members occupied throughout the year. On an average, the yearly income of a male worker works out in terms of money at Rs. 270/-. Generally women are employed only from September to December and their earnings do not exceed Rs. 19/- per month; the maximum for the male worker is Rs. 29 in the same months. The farm requires a well, a godown and a cattle shed. With a little more effort on the part of the members it is possible to raise the productivity of the farm. The surplus which will thus accrue instead of being distributed among the members can be mobilized and marketed, and the income may be set apart for the investment expenditure on the items mentioned above. The Government loans and subsidies can cover the deficit. But the difficulty is, that all the members are not regular in their attendance on the farm and their work-load is not uniform. This lowers the output. It seems this society may show progressive improvement within one or two years.

The Ambegaon farm is not on one compact block and its members belong to two villages—Ambegaon and Umrle in Dindori taluka. The latter has more landless labourers (483) than the former (21). In all there are 28 members, 14 from each village. The area covered by the farm is 174 acres and 31 gunthas. Out of these, 149 acres are cultivated. The members from Umrle have to track the distance of 10 miles everyday to work on the farm. This farming society raises only winter crops. The members do not have work all the year round and their income is very low. Paddy could be cultivated in rainy season after clearing the land, but that presupposes capital expenditure and hard labour. Perhaps mixed farming may help the members out of the miserable plight. The society does not show any marked progress and it has not even been able to complete the construction of either a cattle shed or a well for which money was advanced.

The observation of the working of these societies reveals the following weaknesses:-

Firstly, the farms are organized on waste lands and require heavy investment for making them cultivable. The members of both the farms belong to backward classes who, prior to joining the farms, were eking out a meagre livelihood from odd jobs as casual workers and even sometimes as attached workers on others' farms. Secondly, when such farms are organized, the farmers of the village feel a sense of dissatisfaction because they look upon such farms as an infringement of their rights on the grazing land. Incidentally, this may add to the cattle problem of villagers by creating a shortage of fodder. Thirdly, the members of the farms have to suffer opprobrium at the hands of the members of the village community and thus the members are completely isolated from the centre of the village life. Fourthly, members being inexperienced farmers take time to settle down and therefore productivity and efficiency at the beginning are very low. The demonstration effect can very well be imagined than said. Fifthly, since the land is not always in one compact block as in the case of Ambegaon society the efficiency suffers and interest wanes. Sixthly, some of the members are not free from human weaknesses and their short sightedness and selfishness come in the way of other members who are willing to work hard. Seventhly, since the members begin from a scratch, they are easily satisfied if they get a bit more than what they were getting before. But it is this weaker economic position that hinders further improvement. The members have to rely for every little help on other financial agencies and such agencies including co-operative credit societies are not either nearby or not willing enough to come to their rescue. Therefore, securing timely and sufficient short-term finance becomes an impossibility. Unless the farms are able to produce some surplus they cannot be profitable propositions. Finally, the management of the farms leaves much to be desired inasmuch as there is no proper leadership. Proper accounts are not maintained while data regarding yields and costs are not easily obtainable. This retards the scientific crop planning. There is no balance between the pooled labour force and the available resources since the latter are still to be properly mobilized.

#### CO-OPERATIVE TENANT FARMING SOCIETY AND CO-OPERATIVE COLLECTIVE FARMING SOCIETY—KOTHURE

These two societies are discussed separately because they differ fundamentally from the other two. It would be proper at this stage to devote some space to the differentiating features of these farms.

Firstly, they are situated in the same village Kothure in Niphad taluka. Secondly, they are organized on the *galpar* land (tank bed) and therefore, the land is available only for winter cropping. Out of these two societies, one is co-operative tenant farming society and the other co-operative collective farming society. Though the societies are supposed to be organized for the resettlement of the landless, many of the members of the tenant farming society are holders of land in the village. And lastly, the tenant farming society has succeeded considerably while the collective farming society has failed miserably and there is a proposal to convert the latter into a tenant farming society.

The failure of the co-operative collective farming society is due to the investment in capital assets which proved to be of no use to the members. Nearly Rs. 40,000 have been advanced by the Government upto now to the society by way of loans and subsidies for the purchase of a tractor and other accessories, which could not be utilized as the soil was not suitable. Now, the society's debt has mounted to Rs. 50,000. The procedure followed for the distribution of land contained little of the features of the co-operative collective farming. Out of 178 acres of land, 76 acres were distributed to 38 members at 2 acres each, on the rental of Rs. 45, and 30 acres of relatively poor land were parcelled out among 13 members on the rental of 50% of the produce. Only 20 acres were collectively cultivated while 52 acres remained unutilized. Some of the members even rented out land to other farmers thus defeating the aim of co-operative farming.

In addition to the uneconomic and inefficient organization, the society was entangled into a complicated procedure of the Government leasing system. Since the lease had to be renewed every year at the end of the rainy season after the water receded from the bed, the land became culturable only in November. This delayed the sowing of the seeds. The introduction of the system of automatic renewal for at least 5 years may help the members to develop a permanent interest in land. Incidentally, the rent charged is high compared to the assessment in the neighbourhood and also considering the economic status of the members. Of course, Rs. 14 per acre is not excessive, but since all the members belong to the backward classes and do not have any other means of livelihood the payment of rent is a heavy burden on them.

There is no doubt that the society has failed, both because of the indifference and the lack of experience and interest of the members and also because of the uneconomic investment at the beginning, which increased the liability of members without improving their economic conditions.

On the other hand, the Tenant Farming Society at Kothure has succeeded well. It has a membership of 242 persons belonging to various castes, of which the Marathas predominate. Almost all the members are holders of land in the village. The society has 248 acres and 13 gunthas of Government land distributed to members on a rental of Rs. 40 per acre. Each member's holding varies from 30 gunthas to 3 acres and 30 gunthas. The variation is due to the adjustment made for the difference in soil productivity and water supply. Though cultivation is started late in the year, they do not suffer hardships as they have alternative means of livelihood. The cultivation of the *galpar* land enhances their income. In the case of tenant farming society also, the lease is renewed by the Government every year in November.

The land is redistributed every year and inefficient members are made to realise their shortcomings by either allotting them smaller plots or by completely removing them from the society. The efficient or the influential members get the same plot every year. Since the land is of the same type, the crop pattern is uniform and the timings of the operations do not conflict.

The society owns three water lifts and rents them out to the members. Similarly, it owns a boat and a '*rahat*' which also fetch quite a good amount by way

of rents. From the surplus fund thus collected and with the additional financial assistance from the Government, it has constructed a building of its own to house its office, and at present is contemplating to install a diesel engine for securing water supply to the members' fields. As the members do not jointly cultivate the land, the success of the society has no relation to the co-operative land utilization. The leader of the society is not even its member and we do not have any idea of its productivity as the individual members keep the produce to themselves, after paying the usual rental. It may be said that it is because of the initial advantage of the better economic condition that the members have been able to consolidate the benefits of the additional produce of the *galpar* land.

If any generalization can be hazarded from this broad review, it would be rather a pessimistic conclusion. These societies except the tenant farming society have been organized for the landless labourers on the available waste land. But as the waste lands are not easily cultivable and as the surplus labour has a tendency to a massive growth, this unfavourable man-land ratio does not give us optimism. When account is taken of this fact, it is no wonder that the farming population is not attracted towards this experiment. And whenever some do form into a farming society, that is invariably into a tenant farming society, they do with the intention of getting a slice of the surplus land.

#### STRUCTURAL CHANGE AND REORIENTATION OF ATTITUDES

The issue is crystal clear. Do we want to limit co-operative farming to these stray experiments or do we want to reorganize the land operation and land utilization of the whole village? Can we by-pass the long-term end in formulating the immediate policy? If the co-operative village management is the goal, is there any chance of achieving this goal merely by settling landless labourers on waste lands? These farms have a negative value, because they do not form part of the wider programme of rural regeneration but on the contrary distract us from making a consolidated attack on the central problem of the Indian economy, *i.e.*, man-land ratio.

Our crying need to-day is to draw away the surplus population from agriculture, by exploring employment opportunities in the villages. Cottage and small scale industries with efficient technique and ancillary organization of marketing and research, have an overriding claim, both as the means of creating employment opportunities and of producing consumption goods which are in short supply. This will also make it easy for the landless labourers to be gainfully employed and at the same time prevent overcrowding on the newly organized co-operative farms. It is wrong to assume that all the landless are efficient cultivators. Even among those who own small farms, many may prefer to get into occupation with steady income. Most of them may be considered as 'self-employed', and 'disguised unemployed.' If the resettlement of the landless is urgently demanded, the conversion of the uneconomic cultivators into economic cultivators cannot be delayed. But this will have to wait till the time when the operation of ceilings allows for the redistribution of land. An integrated and all round development of urban and rural sectors and of large scale industries producing both investment and consumption goods and small scale and cottage industries cannot be but over-emphasized. At all stages it is the lopsided growth that retards the progress and brings in its wake unforeseen consequences which are difficult to cope up with.

The Report on the Chinese co-operatives recommends consolidation of holdings of the small farmers in one block, which should be as far as possible contiguous to the lands of the co-operative farms. These co-operative farms should be organised either on the Government land or on private land of the small cultivators, who have formed or agree to form themselves into co-operative farming societies, after the consolidation of their holdings. It has even prescribed minimum area and minimum membership for the registration of the co-operative farming societies. If this is accepted, it follows that the Report on the Chinese co-operatives anticipates a structural change. Therefore, stray experiments of co-operative farming societies have limited value, especially in a country like India where on account of unfavourable man-land ratio, revolutionary changes in farming operation can be introduced only after shifting a part of the population from agriculture (without affecting productivity on farms) to other occupations, presuming that the latter are available.

Of course, at the moment the action is directed towards the landless and the waste land. But in terms of growth this will show no results. Actually, co-operative farms have two functions to perform under the existing socio-economic set up: of increasing productivity and of improving operational technique. And these two cannot be achieved without reorganization of the rural economy as a whole. If that cannot be done the alternative is to make available efficient co-operative services to the smallest holder.<sup>11</sup> But this does not belittle the fact that in under-developed and over-populated economies where disguised and seasonal unemployment is wide spread, agricultural reorganization cannot be successfully carried out without eradicating this type of unemployment. Even in the rural area, employment opportunities either on construction work or domestic work as a supplement to farm income or industrial production in cottage industries will have to be created to remove the population pressure from agriculture. "Unless the number of families dependent on agriculture is stabilized there is little certainty for measures of land reform."<sup>12</sup> If the objective of the generation and mobilization of surplus in agriculture is to be attained, we must direct our efforts on all fronts to prevent leakages.

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11. See Shri Amlan Datta's essay : "A Note on Co-operative Farming" in "Essays in Economic Development." He suggests the golden mean between Capitalist and Collectivist or State farming, i.e., "individual peasant farming supported by co-operative servicing" (p. 52).

12. Prof. D. R. Gadgil, Presidential Address delivered at the Fifteenth Annual Conference of the Indian Society of Agricultural Economics, Allahabad, 1954.

## CLIMATE FOR CO-OPERATIVE FARMING

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Co-operative farming has been suggested as a remedy to relieve acute pressure on agriculture arising from the unfavourable man-land ratio. There are a number of variants suggested as suitable under Indian conditions. Some have indicated that collective or co-operative joint farming societies would go farthest in bringing about an enlargement of the unit of production in agriculture and open out opportunities for better resource allocation and higher productivity. In answer to the query that such co-operative organisations as have been created are functioning in a moribund state, it has been pointed out that such contingencies have arisen because of the inflexible co-operative law and the rigid interpretation of the rules governing the organisation and working of co-operative joint farming societies. There is considerable truth in the argument although it is extremely difficult to accept it as the sole ground for the failure of this type of organisations. Under another form of co-operative farm unit suggested, joint approach is limited to certain farming operations such as the joint ownership and use of certain types of agricultural implements and livestock, particularly those which require heavy capital investment. This arrangement offers scope for full and effective utilisation of expensive farm equipments and resources. Some of the advocates of co-operative farming have gone to the extent of suggesting some sort of co-operative approach in evolving a common crop pattern and cultivation practices. Under both these types the basic land ownership and the size of holding as well as the individual peasant's discretion would be left materially unaffected. Their contention is that if co-operation would succeed in this limited way, it would pave the way for the extension of the idea so as to ultimately cover the entire farm operations including the sale of the farm produce, the purchase of necessary farm requisites and consumption needs of the family. There are also quite a few eminent authorities who suggest a co-operative endeavour for the peasants outside actual farming operations. They include arrangements for common technical assistance, the sale of farm produce, purchase of such necessities as fertilizers, manures and implements and articles of domestic consumption on a co-operative basis leaving the peasant form of organisation in agriculture with all its attendant advantages of individual enterprise and discretion intact. Some co-operators who have been in the field of co-operative activity for long and who have found different forms of co-operative organisations working in an unsatisfactory manner rule the above alternatives out of practical bounds under Indian conditions and suggest certain ancillary or subsidiary co-operative activities which are simple to organise, relatively easy to manage and capable of producing quick results. Co-operative societies dealing with the purchase and sale of farm requisites, supply of irrigation water or dairy co-operatives would answer their description. Such co-operatives have been highly successful in some parts of the country. It is the contention that these specialised activities which are so much useful to the peasantry as providing both employment and income opportunities would appeal to the farmers and would pave the way for co-operative activity in different fields including that of collective or joint farming.

There are broadly two approaches to co-operative farming that can be briefly summarised from the above details. The co-operative village management as an ultimate goal set under planning would require that we would make a beginning with joint or collective farming co-operatives, may be on very limited scale, such as one or more co-operative joint farming societies in each village or a region. Any progress in directions other than this would mean that we would be no nearer to our goal of co-operative village management in the foreseeable future. On the other hand, the limited form of co-operation is advocated in farming and allied pursuits as realistic in the sense that any drastic reorganisation of the system of farming at this stage would scare away the farmers and will probably leave us much farther away from the ultimate objective of co-operative village management. Some of the studies that have been produced dealing with the working of the co-operative joint farming societies in our country also lend strength to the above argument. We have some experience of organising co-operative farming societies with a membership predominated by tenant cultivators and on account of the variety of factors, psychological and others, they did not achieve a substantial measure of success. We had experimented with co-operatives with mixed membership of owners and tenants or predominantly owner cultivators. Such a farm carried with it all the disadvantages of being composed of large number of scattered and fragmented fields and would, therefore, be a co-operative joint farm, only in name. There was agitation in the country sponsored by certain political parties to provide land for the landless and the government in answer to that offered lands under their ownership and management in large compact blocks to rehabilitate the landless labourers and *Harijans*. These societies achieved very limited progress although they began with a clean slate. For instance, the agitation of the landless labourers in the Pardi Taluka in the Surat district to occupy grasslands belonging to the landlords for cultivation brought forth offer from the Government of Bombay to settle the landless families from the taluka in the neighbouring Dharampur taluka of the same district where large wastelands are available for resettlement. The Government also offered to finance these co-operative farming societies. The distance between the two parts was hardly 25 miles and yet only a very small number of landless families came forward to migrate to the new co-operative farms.

It is extremely difficult to delineate the factors that contributed to the very slow progress of co-operative joint farming in our country. May be, lack of social homogeneity in our rural society blocked rapid progress of joint effort in agriculture, particularly in the sphere of cultivation. The fissiparous tendencies originating from the socio-economic inequalities in the villages might also have contributed their share to this state of affairs. That the traditional attachment of the Indian farmer to land and his intense desire to function on his own irrespective of the level of efficiency or economic well being that he is able to command in that manner might have also its fair share in the slow growth of joint co-operatives. The truth, however, remains that under our circumstances and as demonstrated by the progress of the co-operative joint farming societies the time does not appear to be ripe for establishing joint co-operative farming societies on a large scale. The Delegation which we sent out to China to study the progress of co-operative farming societies in that country with a view to evolving a pattern for adoption in our own country also appears to have been divided on the question of the success of the institution in China and the efficacy of transplanting the Chinese pattern in our country on a large scale. Perhaps it is because of this

that both in the Second Five-Year Plan as well as in the Delegation's recommendations, they have suggested the organisation of about 10,000 and odd societies in the country as a whole during the period of the Plan. It is enough to point out, therefore, that both from the point of view of the results that we have before us of the various types of co-operative organisations working in agriculture and the serious differences about the form that would suit our own conditions and needs it is extremely difficult, nay highly pragmatic, to indicate co-operative joint farming or any of its important variants as a panacea of our ills in the rural society. The only thing that can be said at this stage is that specialised societies such as irrigation and dairy societies have met with a large measure of success and have created an extremely favourable impression with the peasantry wherever they have been organised not only about the success of activities handled but also about the efficacy of co-operation for tackling a large number of rural problems on a voluntary basis. It would not, therefore, be wrong to suggest that an approach like this would lead to much bigger and better co-operative canvass on a democratic framework in due course.

It is, however, not so much with the question of the choice of the type of co-operative farming societies with all its variants with which we are concerned in this paper, as with the background in which we expect co-operative farming to get under way. In most of the discussions in the subject, we have largely confined ourselves to the organisational and technological problems which either help or hamper progress towards joint farming societies to the complete exclusion of several other factors which are very closely connected with providing the right background for their success. For this purpose, it would be necessary for us to examine the changes that have been taking place about agriculture and the rural society since independence, but more particularly during the First Five-Year Plan and the initial phase of the Second Plan.

We shall confine our analysis to the agrarian reforms that we have introduced during the last decade or so and the progress that we have achieved in the context of our ultimate objectives in the sphere. It will be useful to review the agrarian changes in the country as they affect occupancy and ownership in agricultural lands. Historically, the tenurial arrangements in the country may be broadly grouped under three main categories: the Zamindari tenure which predominated agricultural land management in West Bengal, U. P., Bihar, parts of Assam and Madras, the Ryotwari tenure which is important in the Punjab, Madhya Pradesh, Bombay and parts of Madras although it has some coverage in other parts of the country also, and the third group of minor tenures under which may be indicated the Malguzari, Khoti, Inam and similar other tenures which resembled substantially the Zamindari system. They were sprinkled over a large area and had relatively limited expanse. The zamindari tenure has been abolished for all practical purposes, though technically the ownership passes to the peasants only after the compensation is paid in full. In Saurashtra, for instance, the peasantry has completed the initial bulk compensation payments through the State Land Mortgage Bank in the first instance. The balance of compensation money which would be paid in 14 to 15 instalments each of the amount of the annual land revenue would be discharged annually from the land revenue that will be collected from them. Similarly, in the case of the other zamindari areas in the U. P., Bihar, Bengal, the changeover is more or less complete although the complicated question

of compensation payment remains to be solved. It may be said that so far as zamindari tenure is concerned the distinction that existed between occupancy and ownership has disappeared for all practical purposes. Similarly, in the case of the minor double tenures the conversion into the ordinary ryotwari tenure has been completed through determination and arrangement for payment of compensation to the minor landlords and by bringing inam lands under ryotwari tenure. In the case of the ryotwari tenure also tenancy legislation has been passed in all the States ensuring security of tenure and fair rent to the tenants as a transitional measure. The objective ultimately, however, appears to be the abolition of tenancy cultivation altogether and converting the tenant farmers into full-fledged peasant proprietors. There has been discrepancies and gaps in the tenancy laws of different States either about their comprehensiveness and coverage or their implementation due to the varying standard of administration. But present indications suggest that a complete changeover to peasant proprietorship appears to be only a matter of time. In the Bombay State, for instance, as from the tiller's day of 1st July, 1957, all the tenant cultivators have been deemed to have become peasant proprietors and the land held by them on lease had been deemed to have passed into their ownership except for certain minor exceptional circumstances in which tenancy as a form of cultivation has been allowed to remain to avoid economic distress among certain sections of the population. Thus, both in the zamindari and ryotwari tenures, the ultimate objective of Government policy appears to be to abolish the distinction between ownership and occupancy in agricultural lands and make all the tillers full-fledged peasant proprietors. The transitional difference in the levels of progress both in the zamindari and the ryotwari areas has another repercussion also. It creates a sense of expectation among peasants of being made full-fledged proprietors where the law had been a little behind either in its content or implementation. This will force the hands of the Governments concerned to complete the changeover as early as possible. It is true that where law has gone the farthest as in Bombay, suitable follow up arrangements appear to be absent with the consequence that tenancy might raise its ugly head in one form or another in due course or might enable interested sections to take advantage of loopholes in the law. It is also true that in most of the agrarian reforms that we have executed, no sanctions have been stipulated with regard to the minimum standards of husbandry or productivity that the beneficiary peasants should achieve in the national interest in return for the ownership of agricultural lands. Nevertheless, the establishment of peasant proprietorship emerges as a keynote of our agrarian policy. The question whether to what extent this has been done and how much more time it will take to fully achieve it or whether the extremely difficult rural circumstances in our country would enable completion of the process are a different matter and do not affect our analysis.

The Bhoodan movement, which is essentially a non-official approach to bring about agrarian revolution through goodwill and which has also received considerable official support may be examined from the point of view of its implications on our agrarian policy. It aims at achieving an equitable distribution of agricultural lands through voluntary contributions from those who have lands in excess of their needs in favour of others who have inadequate or no lands to cultivate. The movement primarily aims at providing land to the landless labourers and *Harijans* to whatever extent is possible so as to rehabilitate them as owner cultivators.

A number of repercussions arises out of the suggested changes under the Bhoodan philosophy. It will lead to the multiplications of farms to the extent to which it tries to give land to the landless. And as these lands are to come from others who have more or should be willing to give up possession out of regard or compassion for the have-nots its overall effect would be to reduce the average size of the unit in farming in our country. There are a number of other problems arising from the type and quality of lands that change hands, land transfer and consequent adjustments in land records, the provision of necessary resources and capital to the landless who are to be rehabilitated on land, a continuous follow up agency to look into the progress of the rehabilitated as well as to avoid subsequent undesirable transfers and dispossession, etc. Yet, the basic objective of the Bhoodan movement to create a broader and firmer peasant proprietorship and thus promote as wide an ownership of agricultural lands as possible remains undisputed. The Gramdan movement perhaps will have the same objective and philosophy except for the fact that a reorganisation of rural economy with the village as the basis would be smoother and quicker. Gramdan thus has also the ultimate objective of initiating peasant proprietorship on an equitable and just basis, probably more effectively and rapidly than would be achieved under Bhoodan. The Gramdan movement has so far achieved a larger measure of success in the backward villages whose soil and climatic conditions are unfavourable and the bulk of the population is composed of backward and ignorant communities and, therefore, may confront certain organisational problems in the initial stages. Broadly speaking, however, it may be said that whatever may be the measure of achievement both under the Gramdan and Bhoodan movements and to whatever extent the aim may be to promote the large well being of the rural people, the basic fact of keeping the peasant as pivot of all rural progress by and large remains.

There are certain other enactments to which reference may be made. In most of the States where the ryotwari system predominates ancillary land legislation has been passed which restrict considerably transactions in agricultural lands. They relate to the sale of agricultural lands both with regard to its price and the parties. Limits to future land acquisition by cultivators have been stipulated to prevent concentration of ownership and promote decentralised ownership of farm lands at the same time. There are variations in the achievements in this sphere but, on the whole, the objective is to regulate land transactions in the larger interest of the cultivators so that the non-agriculturists and the substantial cultivators do not gain at the cost of the less disadvantageously placed peasants through the free play of economic forces. The restrictions on land transactions by providing an order of priority according to which land transfers should take place also aim at creating as consolidated and compact peasant farms as possible. In the Bombay State including Saurashtra, these measures are comprehensive and have gone a long way in initiating a change in the land ownership and composition of farms within the territory. What is noteworthy is that these ancillary agrarian enactments are basically consistent with the other major agrarian laws such as abolition of zamindari tenures and the ultimate elimination of tenancy as a form of cultivation. Under the conditions of heavy pressure of population on land in our country the objectives of these restrictions are laudable. There are other measures which restrict fragmentation of fields beyond a certain limit. Most of the States have enacted laws which aim at achieving consolidation of fragmented and subdivided farms and holdings with a certain measure of direct or indirect com-

pulsion mainly in the original ryotwari areas such as the Punjab, Madhya Pradesh and Bombay. The objective in all these is to strengthen the base of peasant farming and to channelise changes in the rural areas that would ultimately work to the benefit of the agricultural classes.

The idea of putting a ceiling on holdings with a view to bringing about an equitable redistribution of available agricultural lands has also been mooted. The Planning Commission had appointed a sub-committee to go into this question which has recommended the basis for fixing the ceiling and also the procedure by which transfer of lands in favour of the small peasant and the landless to introduce a larger measure of social justice and equity in agriculture could be achieved. For want of agreement about the basis as well as the procedure, however, most of the States except Kerala have not been able to make much headway in this direction. Only in Kerala provision has been introduced to redistribute agricultural lands equitably on the basis of a ceiling which generally conforms to the lines suggested by the Planning Commission. The restriction on land transactions, consolidation of holdings, ceiling on farming units, all aim at strengthening the peasant proprietor and aim at insulating him against the free play of economic forces so that he could in due course of time establish himself on a firm and broader basis.

The trends of agrarian reforms that have been introduced in this country bring out that originally when we embarked upon reorientating our agrarian set up, our objective was to revitalise and establish peasant proprietorship on a firm basis. In a country where land hunger is traditional and where the peasant's attachment to land is proverbial the policy created tremendous impression. Presumably it was conceived as a solution of the land problems in our country. It might have also been anticipated that the development of subsidiary non-farm activities in the village and a variety of decentralised cottage and small scale industries would strengthen the farm economy by providing the peasant with an overall adequate income and employment. The decentralised industries' sector in the rural areas would also provide employment to those who could not be settled as peasant cultivators.

In this context, the idea of introducing co-operative farming with a view to universalising it as a system of farming ultimately appears to be an after thought borne of the realisation that the original policy of strengthening the peasant base might not go the whole way and that it would take a much longer time than expected to create necessary subsidiary occupation and the decentralised industrial structure. Therefore, it might be appropriate to try to bring about the expansion in the unit of cultivation in the rural areas through popularising co-operative farming simultaneously. Co-operative farming also might appear to be an answer to the extremist cry for collectivisation and as a political antidote. As the position stands, we appear to be working at cross purposes trying, on the one hand, to provide a firm base for peasant proprietorship and, on the other, to expect them to be persuaded to agree to institutional approach to socio-economic problems in agriculture. Thus, by its very nature, we are not likely to succeed. The earlier agrarian policy which is more palatable to the cultivators and is emotionally satisfying to them would overwhelm the subsequent effort to introduce co-operative farming essentially on a democratic basis. If we had the objective of co-operative village management and co-operative farming as suitable solutions to our farm problems in

view at the outset and if we had not allowed political considerations to outweigh other fundamental facts we would have tried to introduce an element of compulsion while abolishing double tenures and the tenancy system of farming and transferring ownership of land to the millions of tiny peasants in the country. For instance, the new set up could have been initiated by providing, with a measure of compulsion, if necessary, that the peasants who came to own land for the first time should join co-operatives as a precondition. We could have even provided for a certain minimum standard of husbandry and conveyed to the peasants that if they did not satisfy those standards they would have to agree to co-operativisation of their lands. It is extremely difficult to persuade ourselves to believe that our agrarian policy that we have been pursuing for the last 10 years was in any way conducive to create the necessary background and atmosphere for the successful initiation of co-operative farming.

Moreover, the reorganisation of tenurial relations have been relatively rapid. On the other hand, processes such as consolidation by their very nature would be slow. The speeds of the variety of agrarian changes have been unequal. They lack the essential element of sequence. All these act a drag on the ultimate objectives of co-operative village management and co-operative farming.

From the above analysis, it would be clear that although co-operative farming might go a long way in easing our land problem it has not the necessary climate for its success. Agrarian reforms of the last decade with the objective of firmly planting peasant proprietor on land are likely to serve as a drag to co-operative farming. For another reason also co-operative farm may not see an end to the bulk of our farm problems. Co-operative farming would leave the problems of the landless in the rural areas who number roughly 35 millions virtually unaffected. On the contrary, it might aggravate them to the extent to which co-operative farms would try to achieve higher productivity through technological advance which *ipso facto* involves displacement of farm labour. For, as it is, co-operative farming would hardly be an answer to the already high unemployment and underemployment in agriculture even among the cultivators themselves as it would only collectivise the problems that has its origin in the unfavourable man-land ratio. It is, therefore, time for serious introspection with a view to evaluating objectively our various agrarian reforms and attempt to rationalise them so as to create the necessary preconditions for a successful initiation of co-operative farming and joint village management.

# MIXED CO-OPERATIVE FOR JOINT CULTIVATION AT GAMBHIRA, KAIRA DISTRICT (MIDDLE GUJARAT)

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## *Introduction*

The river Mahi is a natural boundary separating the districts of Baroda on its south and Kaira on the north in the middle Gujarat. Padara taluka of Baroda district and Borsad of Kaira district border just oppositely the banks of the river. Here the river takes a steep curve and forms a peninsula on the border of Borsad. This peninsula once had large area of fertile '*bhatha*' land and grew important crops like tobacco, pearl millet, oilseeds and pulses. Parts of this area were privately owned by the cultivators, mostly from backward and poor communities like *Barias* and fishermen and parts were owned by the Government. The Government used to auction out its land annually for cultivation and realised about Rs. 175 per acre. The contractors in their turn rented out this land to the farmers for tobacco cultivation usually on half share system.

The heavy and repeated floods in the river Mahi in 1927, 1941 and 1949 washed away '*bhatha*' land privately owned and deposited deep layers of sand and rendered its large parts useless for cultivation. As a result, large number of cultivators in this area became landless. In 1951 to help the distressed cultivators the Government granted 246 acres of land to 176 cultivators from the villages, Gambhira, Kothiakhad, Nanisherdi, etc., situated in the area. Those cultivators were cultivating this land in pieces of an acre or so. This helped them little since most of the cultivators were resourceless and had to depend for water for their crops from the owners of the pumping plants on the half share system. Some of the lands were also saltish and yielded nothing. The Government's efforts, therefore, to rehabilitate these farmers by giving them land failed. Thereupon, it was suggested to the Government to organise these cultivators into a co-operative collective farming society on this land. The suggestion was accepted and the society started functioning in the agricultural season of 1953 and was registered the same year, a few months later.

## ORGANISATION

### *Family Groups and Blocks*

The society has now 209 members cultivating 204 acres. For purpose of cultivation the members have divided themselves into seventeen groups each consisting of 5 to 18 members and cultivating a block varying in area from 6.82 to 18.97 acres, the average number of members per group and average area per block being 12.3 and 12 acres respectively. The main criterion in forming these groups was the maximisation of mutual co-operation amongst the group members to ensure smooth and efficient working. The average area cultivated per member

TABLE I—THE TOTAL FAMILY MEMBERS, WORKING MEMBERS, AREA CULTIVATED OUTSIDE THE SOCIETY, LIVESTOCK AND IMPLEMENTS IN TWO CULTIVATING GROUPS OF THE SOCIETY

Group No.	No. of member families cultivating in a group	No. of family members				Working members				Area cultivated outside the society in acres		
		Men	Women	Boys	Total	Men	Women	Boys	Total	Own	Rented	Total cultivated
1	2	3	4	5	6	7	8	9	10	11	12	13
I	12	28	20	29	77	24	20	1	45	12.07	2.29	14.36
II	12	29	24	33	86	27	17	3	47	16.09	4.02	20.11
Total	24	57	44	62	163	51	37	4	92	28.16	6.31	34.47
Average per family	—	2.38	1.83	2.58	6.79	2.12	1.54	0.16	3.82	1.17	0.26	1.43

Group No.	Livestock				Implements				
	Bullocks	Buffaloes	Young stock	Ploughs	Seed drills	Harrows	Hoes	Others	Total
I	10	8	17	7	7	—	10	4	28
II	11	12	22	6	5	5	13	9	38
Total	21	20	39	13	12	5	23	13	66
Average per family	0.87	0.62	1.61	0.54	0.50	0.21	0.96	0.54	2.75

in different groups varies from 0.76 to 1.36 acres with the overall average of 0.97 acre. This variation is due to the adjustment that has been made for the difference in soil productivity of blocks allotted to different groups.

The members also cultivate land, mostly owned, outside the society. It was not possible to collect detailed information of all the groups regarding their agricultural resources but the information on the point pertaining to two groups has been collected which is given in Table I.

Out of 24 families in two groups 18 cultivate land outside the society. Amongst them 15 cultivate their owned land and the rest rented. The area cultivated per family outside the society comes to 1.43 acres. This, together with the area cultivated by the society, comes to nearly two and half acres per family. The data in Table I show that there are a pair of bullocks, a plough and a seed drill and two hoes between two families cultivating about 5 acres, on mutual co-operation. The number of bullocks and implements are related functionally.

## CROP PATTERN

The society has 204 acres of cultivated area and its total cropped area is 330 acres. The corresponding figures for the village Gambhira are 2,222 and 2,423 acres respectively. This shows that the society is cultivating its land more intensively, an acre of land being cropped more than one and a half times. There are two main reasons for this; firstly, the very fertile 'bhatha' land in the river bed and secondly, the better irrigation facilities the society has. While the society owns four pumping plants, the village as a whole has only 12. Table II gives the area under different crops and per-acre yield of important crops on the land owned by the society in 1956-57.

TABLE II—AREA UNDER DIFFERENT CROPS AND PER-ACRE YIELD OF IMPORTANT CROPS : 1956-57

	Name of the crops	Area in Acres	Area under different crops as per cent to total cropped area	Yield lbs./acre	Yield lbs./acre on similar type of soil nearby
Monsoon crops	Tobacco .. .. .	132.25	40.00	1656	998
	Pearl millet .. .. .	12.65	3.83	967	743
	Paddy .. .. .	40.25	12.17	1505	—
	Small millet, Pulses & Oilseeds ..	79.35	24.00	—	—
	Total .. .. .	264.50	80.00	—	—
Winter crops	Wheat .. .. .	8.62	2.61	1386	665
	Sorghum (Jewar) .. .. .	5.75	1.74	1133	—
	Total .. .. .	14.37	4.35	—	—
Summer crops	Pearl millet .. .. .	13.22	4.00	1609	—
	Sorghum (fodder) .. .. .	17.25	5.22	550	—
	Sorghum (Batu grass) .. .. .	21.27	6.43	—	—
	Total .. .. .	51.74	15.65	—	—
	Grand Total .. .. .	330.61	100.00	—	—

The table shows that out of the gross cropped area of 330 acres in 1956-57, 264 acres or 80 per cent were under monsoon crops, 14 acres or 4 per cent under winter crops and 52 acres or 16 per cent under summer crops. The food crops covered 159.85 acres or 48.35 per cent of the gross cropped area. The important amongst them were paddy, pearl millet, small millet, pulses, etc. Amongst the non-food crops were tobacco and fodder. Tobacco was the important money crop covering about 40 per cent of the gross cropped area and responsible for about 77 per cent of the total receipt. The table further shows that the yields of wheat and of tobacco on the society's land were 100 and 66 per cent higher than those of the crops on the same type of soil in the vicinity.

## INCOME DISTRIBUTION

The members of the society are not working on daily wages as is the case in other collective farming societies but the members in group jointly cultivate their block with their family labour, bullocks and implements. From the produce of the plot the members give over half to the society and retain the other half for themselves as remuneration for their resources employed in production. From the half that the society retains, it meets its administrative expenses, pays about Rs. 17,000 as land rent to the Government and provides irrigation and tractor ploughing facilities to the members. For tobacco crop, it being a chief source of receipts, the society has been supplying to its members free seedlings since last two seasons and for the current crop it has supplied to them manure, about 74,000 lbs. of groundnut cake free of cost. The society has incurred an expenditure of Rs. 9,200 on this account. The society is rendering all this assistance to the members from its own funds, without any financial assistance from the Government or any other institution in the form of loan or subsidy. It has built from its profits various common funds such as reserve fund, machinery depreciation, improvement fund, etc., amounting to Rs. 75,000 of which the reserve fund alone constitutes Rs. 50,000.

The society after allowing for dividend, and amounts to be taken to various funds and staff bonus, distributes the balance of net profit equally among all the members. Table III gives the amount received by each member as half the share from the produce and bonus from 1953-54 to 1956-57.

TABLE III—AMOUNTS RECEIVED BY A MEMBER AS HALF THE SHARE IN THE PRODUCE AND BONUS : 1953-54 TO 1956-57

								1953-54	1954-55	1955-56	1956-57
								Rs.	Rs.	Rs.	Rs.
Amount received by each member :											
(a)	half the share in the produce	..	..	..	..	..	..	229	227	408	487
	and										
(b)	bonus	..	..	..	..	..	..	—	—	119	109
Total	..	..	..	..	..	..	..	229	227	527	596

Since the area cultivated per member is 0.97 acre, the total return per acre to a member comes to Rs. 614.

## MANAGEMENT

For the management of a block allotted to a group, the members of each group select their own leader in consultation with the managing committee. The points to be considered in the selection of a leader are his integrity, farming experience, his economic position particularly with reference to the agricultural resources so that in time of emergency he can cope up with the work and the last but not the least important is his ability to command. He plans and executes the cropping scheme of his block in consultation with the chairman. He has to indent labour both manual and bullock, proportionately from the members of his group according to day-to-day requirements and see that all field operations are carried out timely and efficiently. The operations like irrigation, tractor ploughing, haulage,

etc., are managed centrally by the society by means of four pumping plants, a 30 B.H.P. tractor with a plough and a trolley. Till 1955-56, the society loaned its pumping sets for irrigation to the members at Rs. 1-4 per hour, *i.e.*, half of what it used to cost the society, giving 50 per cent concession while last year this facility was entirely free of cost. For tractor ploughing the society charges Rs. 10 per acre.

Three supervisors are employed in the society at Rs. 60 per month, and they supervise the working of the machinery. The leaders of the groups plan out the programme for these operations in consultation with the supervisors. The purchase of production requisites like manure, oils, etc., and sale of produce are managed by the chairman in consultation with the managing committee. The chairman conducts the whole business of the society assisted by the honorary secretary with an honorarium of Rs. 1,000 per year. The administrative expenses and value of the agricultural produce of the society from the year 1953-54 to 1956-57 are given in Table IV.

TABLE IV—MANAGEMENT EXPENSES AND VALUE OF AGRICULTURAL PRODUCE OF THE SOCIETY: 1953-54 TO 1956-57

			Management expenses (includes office expenses, rent, pay, stationery, travelling allowance, etc.)	Value of agricultural produce	Management ex- penses as per cent to the value of agricultural produce
			Rs.	Rs.	
1953-54	..	..	3181.31	90,641.00	3.59
1954-55	..	..	3153.00	97,591.50	3.23
1955-56	..	..	4202.54	1,61,128.53	2.60
1956-57	..	..	3568.72	2,02,559.00	1.76
Average	..	..	3526.39	1,37,980.00	2.55

The data in the table above show that the proportion of management expenses to the value of the produce in 1956-57 has gone down to 1.76 per cent from 3.59 per cent in 1953-54, the average for the last four years being 2.55 per cent. This is due to the fact that during this period the receipt has more than doubled while the administrative expenses have remained more or less stable. The increase in receipt is due to improvement both in quantity and quality of produce particularly tobacco.

#### CONCLUSION

The organisation of the society is blended in a way so as to ensure efficiency in production and social justice in distribution. To ensure the economic efficiency, the entire area of the society is operated not in one unit but has been divided into blocks or units operated by limited number of families. This organisation characterised with small units both with respect to number of families and area is responsible for better understanding, and mutual co-operation amongst members in cultivation and secondly better care of crops due to closer supervision. Again,

the society by handing over half the produce from the block to the operating families has been able to maintain their personal incentive to work hard since they stand to derive direct benefit, upto the extent of 50 per cent, of the increase in production due to their efforts. In contrast to this, the method of paying daily wages to the members in the farming society in the vicinity has tended to encourage inefficiency and insincerity among members, since once they go to society's land for work they become eligible for a day's wage whether they put in adequate work or not. Again, in the season when there is pressure of work, members attend first to their own land while in the off-season they flock for work on society's land. The society thus faces the dual problem of coping up with seasonal work and paying uneconomic wages to the members in the off-season with the adverse effect on the earnings of the society.

The policy of distribution of produce from the land can be said to be marked with social justice firstly because, the real obstacle to the farmers in increasing the produce from land is the cash money they need for seed, manure, irrigation, plant protection, etc. The society supplies the production requisites to all its members free of cost or at concessional rate, if latter, the cost is recovered from the sale proceeds of the crop. This gives all the members equal opportunity of directly adding to their receipts to the extent of 50 per cent of the increase in production and in case of crop failures it gives equal protection to them. Secondly, after allowing for contribution to different items specified in the bye-laws the balance of net profit is distributed equally amongst the members. Thirdly, the society has constructed three buildings, two for school and one for common use in the villages Kothiakhad and Nanisherdi at the estimated cost of Rs. 16,000 with about 50 per cent help from the Government and other institutions. The society is thus extending its benefits to the non-members also and has thus won over their goodwill, a factor to be reckoned with in smooth working of the society. In fine, the factors responsible for successful working of the society are: (1) good leadership the society has in its chairman; (2) the fertile '*bhatha*' land of the society; (3) homogeneity in the socio-economic class structure of the members; (4) pattern of organisation with the balance of emphasis on efficiency in production and social justice in its distribution.

## CO-OPERATIVE FARMING IN THE PUNJAB

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Official as well as non-official opinion is divided on the feasibility of co-operative farming in India. Those who oppose the introduction of co-operative farming base their argument in the decline of agricultural production due to the lack of personal interest of the members in co-operative farms. So much so, some States like Uttar Pradesh have become actively hostile to the idea of co-operation in the field of agricultural production. On the other hand, the protagonists of co-operative farming claim a great future for co-operative farms and they assert that co-operative farming is the only way to improve agricultural production in general and the lot of villagers in particular. As early as 1928, the Royal Commission on Agriculture remarked that "If co-operation fails there will fail the best hope of

Rural India." Now, it is an accepted policy by the Central Government that efforts should be made to establish co-operative farms in the States, although on an experimental basis. It may be added, however, that the extension of co-operative farming is proposed to be brought about not by force or coercion but by education, persuasion and financial incentives.

#### AGRICULTURAL CO-OPERATION IN THE PUNJAB

In the number of societies, the Punjab with its 441 co-operative farming societies at the end of the year 1955-56 is probably the leading State in India. The degree of co-operation in the farming societies differs widely. On the one hand, there is a co-operative farming society which at one time had the maximum of co-operation conceivable even under the Communist regime. There are, on the other hand, societies which do not adopt co-operative methods so far as farming is concerned. These may be either newly registered ones which have not yet started farming or which have for one reason or the other failed, or those which may have been registered for reasons other than genuine co-operative farming. But the general pattern of co-operative farming societies is that they are carrying on farming with varying degrees of co-operation and success.

Many of the societies are organized by people who are well knit and related to each other. In certain cases even the agricultural labourers have been included in the co-operatives. Inclusion of agricultural labourers in the membership of societies is intended just to meet certain legal requirements provided under the bye-laws. The shares in such cases are actually paid by the "Real" members and they are solely responsible for the profit or loss incurred by the society. The "Dummy" members (labourers) are not concerned with profits or losses. In a great majority of cases the dependants of members and even the minors have also been enrolled as members.

The co-operative farming societies came into existence after the dawn of independence in this State and it is yet too early to pass a final judgement on the practicability of the movement. In judging the working of the movement one may consider the various factors that come into play in the smooth running of the co-operative farming society. These factors are the same as for any other type of business organization, namely, land, labour, capital and organisation. Regarding the first three, namely, land, labour and capital, there does not seem to be much difficulty. These can be arranged somehow. The bottleneck is the fourth factor, i.e., organisation. It is here that the societies face maximum of difficulties. To illustrate this point and to give a better idea of the type of the difficulties that may be experienced by the farming societies the following case studies are quoted:—

##### *Sewa Nagar Society*

The society consists of 36 land owning families settled in Parhwa village in Kapurthala district. The settlers who hailed from a number of villages in Lyallpur district (West Pakistan) are known to each other before. Only the heads of the families are members. The adult dependants of these members work on the farm and get remuneration for the same.

The total area allotted to the members is 958 acres. Thus the average holding per family works out to over 26 acres. This may be considered as a large sized

holding. The members of this society after getting lands in this village embarked upon a big venture of community living. They pooled together all their resources and started as one family. The whole land belonged to the community and all the able-bodied members including women worked for the society. The produce was used in common. There was one kitchen for the entire community and the women worked there in turns. All the milch cattle were owned in common and milk was distributed according to the needs of individuals. The working bullocks and other productive resources were also used in common. In short, there was co-operation both in production and consumption.

However, two important deviations from the prevailing normal set up of families may be noted in the organisation of this society. These are (i) abolition of 'Home' as a binding factor of the family members and (ii) virtual abolition of the ownership of land.

The impact of these two factors may be studied in the light of experience gained. The change to a common kitchen for the entire community could not work well. The families did not like that sort of regimentation, and the set-up had eventually to be abandoned. Now each member has a different household where the family cooks its own food and has all the comforts that it can provide itself within its means. The buffaloes are maintained by the individuals, the fodder being supplied by the society and accounted for against the names of members. The evaluation of standing fodder crops are done and the family members themselves bring the fodder home.

The second change, however, according to the members of the society had a healthy effect although some changes had to be made now and then. It may be pointed out that the society was started at the time when all these people had lost most of their worldly belongings and were in a mood to share the sufferings. But as the economic factors began to manifest themselves the outlook of the members began to change. As a first step they had to recognise the right of the members in accordance with the amount of land each of them held. Some remuneration was paid for the landed property. The members did not know the demarcation of individual plots. In fact, the details of demarcation was not recorded in papers. Each member knew the total area that belonged to him and his share in the overall position of the society. This factor held people from drifting away from the society. It is also stated by some persons that official pressure was exerted at some stages to bring around people who had been misguided by some interested parties to break away from the society.

The society continued to work in this manner for a few years. Later, the land came to be managed in four groups. Each of these groups had a separate plot for cultivation. The main cropping scheme and rotation was decided upon by the society. Preparations of land and the like were done with the help of the society's tractor. The members of the groups get  $1/4$  of the total produce of their respective blocks *in lieu* of the services rendered by them. The remaining  $3/4$  of the crops would go to the society's account. The society paid  $1/3$  of the total produce of the village as "*batai*" to the members proportionate to the amount of their land. From the remaining  $5/12$  share of crops, the society managed to meet all the expenses on tractor, tube-wells, seeds, manure and the like. This sort

of arrangement still continues, but some of the members are not very enthusiastic about it.

*Finance*.—Initially, the finances were contributed by members alone. But the real progress was made after the Government patronized the society by giving a sum of Rs. 85,000 as loan through the Co-operative Bank, and another sum of Rs. 22,492 as subsidy, for the purchase of machinery, etc. The success of the society was such that it enabled the society to return practically the whole of the loan taken from the Co-operative Bank in about 3 years' time. Towards the beginning of 1955-56 the society had two tractors with implements and six tube-wells, with an approximate value of over Rs. 37,000. Apart from these, the society had working cattle worth over Rs. 10,000.

*Managing Committee*.—The day-to-day management of the society is entrusted to a managing committee consisting of five members out of which one is the permanent President, the others being the vice-president, cashier, secretary and one ordinary member.

Sewa Nagar Society is a bold experiment in co-operative life and deserves a careful study and sympathetic consideration from those who are connected with rural development.

#### *Gagra Society*

The second society worthy of mention is the Gagra Society in the Ludhiana district. The society is at present in the process of liquidation, but the short spell of its life has a tale of its own to tell. The society organised by refugee colonists from Lyallpur made a very good start. Actuated by the ideal of service the members of the society decided to accept only Rs. 45 p.m. irrespective of the skill involved, whereas an ordinary hired farm worker was being paid Rs. 60/- p.m. It was also decided to take only 1/3 of the produce for land as against the prevailing practice of getting 1/2 for the land. The members contributed shares and with a small loan from the co-operative bank, the society purchased a tractor and installed one tube-well and one pumping set. New bullocks were purchased by the society and the members were asked to dispose off their own (which they had before the formation of the society) in any way they like. Milch cattle were owned and maintained individually, the fodder being supplied by the society after proper evaluation. The society thus had a solid organisation, the members were in high spirits and even the outsiders were hopeful of its success. But the actual facts do not support this contention.

The factors which led to the downfall of the society are : (i) false promises are said to have been made by the high personalities including politicians and officials, which were never fulfilled and due to which the members lost faith in co-operation ; (ii) hostile attitude of Government departments, including the co-operative department ; (iii) sudden withdrawal of credit given to the society by the co-operative bank ; and (iv) the managing committee struck a bargain with the State Agriculture Department for the supply of certain quantity of cotton. This, however, was not recorded in writing. Before the actual delivery could be effected the prices of cotton fell and the agricultural department refused to honour its commitments. The management of the society with the help of the co-opera-

tive department entered into a lengthy correspondence and negotiations. The negotiation finally failed, resulting in a further loss due to further decline in prices. This gave severe setback to the working of the society, which could not keep the members together.

The last blow was struck when the society decided to suspend its business of co-operative farming till the time consolidation of holdings was effected, but after consolidation no member had the enthusiasm enough to revive the society.

### *Jamalpur Society*

This society was started by the refugee settlers of village Jamalpur near Ludhiana. The members knew each other before they settled in the village. The chief aim in organising the society was to introduce mechanised cultivation for their lands which had been infested with heavy growth of grass. The grass lands were rather difficult to control as the allottees had been given large holdings each. The allottees had no money to individually purchase heavy machinery nor were the individual holdings big enough to provide sufficient work for the tractors. At the same time the Government (Co-operative Department) seemed to be enthusiastic about organising the co-operative farming societies.

Each of the members retained a portion of their holdings for cultivation of fodder and other crops and gave the rest of their land for cultivation to the society. The society failed after about two years working due to the following reasons :

Firstly, the liquid monetary resources of the society's members were invested in the purchase of heavy machinery and installation of tube-wells which could not be worked for want of more money. The assurance of the credit by the Co-operative Department was not honoured in time. Secondly, due to draught the crops of the society failed resulting in heavy financial losses. Thirdly, there had been heavy expenses on the reclamation of grassy lands, which could yield dividend only in the years to come. And lastly, the lands retained by members for self-cultivation were the best available with them. So the chances of the society covering up the gap between income and expenses were eliminated. Consequently the society incurred heavy losses, and the co-operative bank was rather reluctant to advance credit. The members, therefore, decided to wind up the society.

### *B.G.S. Co-operative Farming Society, Shabazpur*

This society has been organised by refugee settlers of Shabazpur village in Gurdaspur district. From agricultural point of view this is said to be one of the best run societies in the State. However, most of the members are absentees. The Managing Director, who is a retired army officer, with good managing ability, is the only paid member. A few others do the supervisory work on honorary basis. All the members are related to each other and quite a few are ladies. The work at the co-operative is fully mechanised and the entire work in the fields is done by hired workers.

The points worthy of mention about the society are that none of the members of the society is capable of doing bullock farming. In order to cultivate their lands, they had to resort to machinery which also necessitated their pooling of lands. They could thus secure co-operative credit. The members could avail themselves of the help of a paid managing director who managed the business of the society.

Another society worthy of mention is the Undata<sup>1</sup> (bread giver) Fazalpur co-operative farming society. "A report published by the Planning Commission says that most of the members do not stay on the operational area. There is no provision made in the by-laws of the society regarding the minimum amount of labour required to be put in the farm by any of the members. Farm work is done by paid labourers who are obviously not members of the co-operative society. The manager lives at Kapurthala, three or four miles from the farm. He visits the farm daily to give instructions." "In general, though the society is a success, the fact that it is more or less a family concern prevents one from considering it as a genuine experiment, in co-operative farming as such."

From the foregoing examples, it may be deduced that the co-operatives are doing well, where there are efficient managers available and the members are not active workers. These societies in a way, function as joint stock companies, and may not be considered as co-operatives, where more emphasis ought to be on joint efforts in terms of labour. In the case of farming societies where members were mostly peasant proprietors and worked in the societies the experience has not been so happy and a great majority of farming co-operatives had to stop work. This, however, should not be interpreted as a signal to declare the failure of the co-operative movement in so far as farming is concerned. There had been genuine difficulties in the way of these societies, and it is not fair to give final verdict without giving due consideration to the difficulties they faced. Unless these defects and short-comings are removed it may not be possible to have successful co-operative farming societies.

With a view to eliminating the existing defects and to give fair trial to the farming co-operatives the following suggestions are made :

1. Experience has shown that there is a close link between co-operation and mechanisation. The Government may do well to establish machine lending stations and to form a co-operative of the existing tractor owners in the State.
2. There should be a subsidy on oils and lubricants used, for genuine agricultural purposes as is done in most Western countries.
3. Some of the existing societies or a few newly organised ones, may be given all possible encouragement and formed into model co-operative societies. This will serve as an example to the villagers, and will also give an idea to the departmental authorities as to the best type of organisation suited to our conditions.
4. There is no charm in the word 'co-operation' unless it can bring increased gains to the co-operators. This is possible only with increased production which

<sup>1</sup> Article in the *Tribune*, September 8, 1957 by Surinder Singh.

needs the employment of scientific methods. For this and for running the general organisational set up of the societies free services of trained agricultural graduates are a necessity. These should be provided by the Government at least in the beginning, free of charges. Such a step has probably already been taken in Bombay State.

5. The organisation of the society should be such that as far as possible the society should pay for all the factors of production, as a share of produce.

6. Under the present conditions each of the societies pays 15% of its profits as audit fee. This is exorbitant especially when we analyse the sources of profit of these societies. It has to be recognised that the nature of profit of a credit society and that of a farming society differs in essential details. The existing system of taxation gives rise to a number of malpractices and cannot be justified as a sound taxation policy.

7. More credit should be made available to the farming co-operatives. It should be ensured that the same is needed for productive and sound investment, and is actually used for that. It is said that in many cases the loans were not available when actually needed by certain societies ; on the other hand, huge sums have been secured by influential people, and used for other purposes. It is further alleged that even the instalments are not being paid regularly by these people.

8. Co-operative societies may be exempted from the ceiling on land holdings, and the waste lands may be allotted only in favour of co-operative societies.

9. Co-operative staff engaged with farming societies should be well-versed in agricultural practices. This was the case in erstwhile Pepsu area.

10. Experiments in co-operative farming may be made on village common lands. These may be cultivated jointly in addition to each villager doing his own farming. This will give good income to the Panchayats and also give a trial to the human material in co-operative life.

More than anything else it is the proper climate which is required to be created. The impulse for making co-operative farming a mass movement, must come from a successful example within the country itself.

# THE BASIC APPROACH TO CO-OPERATIVE FARMING

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Without entering into the consideration of the usual arguments for and against co-operative farming, which have by now become only too well-known, the paper seeks to raise the rather more crucial question as to what should be the *basic* approach to co-operative farming in the context of development planning ?

In visualising any fundamental reorganisation in the agrarian sector, one way of analysing the problem is to consider, first, whether such reorganisation would lead to greater efficiency ; and, second, whether it would tend to eliminate elements of exploitation, if there be any. To these considerations may be added a third factor—whether the changes sought to be brought about are being planned in a manner that would secure economic advance along democratic and egalitarian lines. Then again, particularly in framing a land reform programme, the type of farming to be established must needs take into account the aspirations and habits of the farming population. The reason why these fundamental issues are raised at the outset is that here we are now moving in a world of ideology, of doctrinaire preferences and prejudices, of oratory and public passion ; and there is the fear that the problem may as well be turned over from the economist to his tougher *confreres* in politics. Such an analysis in basic terms may therefore pave the way for a proper appreciation of the various issues involved in the problem.

## II

We start with the proposition that there appear to be no compelling reasons to adopt co-operative farming (with pooling of land and joint management) as a *universal* or general pattern of farming all over the country.

Before we begin to discuss this aspect three important points need to be emphasised. Firstly, *mere* pooling in of land and joint management may, *by itself*, bring about at best some marginal increase in the total product ; the average product per person may not be much higher because the total product has to be shared amongst the same number of persons. The second point which follows is that substantial advantages may be derived only *if* arrangements are made to drain off surplus labour as well as livestock. Thirdly, in stressing the advantages of co-operative farming the general tendency is to assume away what can be called the past-pooling-of-land phase of activity. The scientific way of judging the relative merits should be to consider : (a) whether such a programme was not at all feasible in the previous situation, say with reference to peasant proprietors and (b) if yes, whether the benefits that now accrue under the co-operative farming are *greater* than those possible under peasant proprietorship.

The most important argument generally advanced in favour of co-operative farming is based on the principle that the larger the agricultural enterprise the greater the increase in productivity. Here there is the danger of using the methods

of economic analysis without making explicit the assumptions on which the analysis is based. This principle rests on two assumptions : (i) that there is competition between the factors of production and (ii) that there are economics of large-scale production. These assumptions are valid in advanced countries but are generally not valid in relation to the land systems of the underdeveloped countries, simply because capital plays so small a part in production. If productivity is any indication,<sup>1</sup> as the Report of the Indian Delegation to China (Krishnappa) itself points out, the crops in the best areas or in the best farms in India are no worse than those in the best areas or in the best farms in China. If the performance of this group of "best farms" is comparable to that of the best co-operative farms, there is no reason why at all they should be disturbed. In fact the organisational and psychological problems implicit in drawing these farmers into the fold of the co-operatives may as well be advanced as reasons to the contrary.

Arguing on these lines certainly does not mean ignoring the other side of the picture, namely, the extreme smallness of the size of a majority of farm units. The relevant data from the Rural Credit Survey are so well-known that it would be superfluous to reproduce them here. The main conclusion is that "the size of farming business of at least half of the cultivating families in India is such that it is futile to consider them as independent units of land exploitation in any plan for a developing economy."<sup>2</sup> Increase in the unit of management of land thus becomes a precondition for increase in the agricultural productivity or for that matter, for the adoption of progressive agricultural practices in general.

In regard to the size of the agricultural enterprise there is another important consideration. Land being a scarce factor, there is the need, from the social point of view, to break the monopoly interests in it. A more equitable distribution is certainly called forth, which brings us to the question of the upper limit to size of farms. One way of deciding the issue is to draw the line at a point where permanent hired labour is employed in sizeable proportions. In a sense, it is exactly here that the element of exploitation may be said to begin to emerge. Any progressive land policy should therefore aim at eliminating such elements and thereby bringing about a more equitable distribution.

Then there is the argument that the real difficulties in the way of speedy improvement of land and intensification of agriculture in India arise mainly out of limitations inherent in family farming which, it is said, "is characterised by the considerations of money cost (outlay) and benefit (return) to the individual farmer rather than the social costs and social benefits." It is indeed true that there are many types of capital investments essential for the improvements of agriculture, which cannot be undertaken by an individual cultivator. This, at best, goes to emphasise not so much the inherent limitations of family farming as the necessity of some sort of co-operative or state action.<sup>3</sup>

Further, it is essential to emphasise that the *real* needs of Indian agriculture, to put in simple terms, are more intensive farming, better seeds and improved im-

<sup>1</sup> See the discussion in Land Reform and Economic Development, D. Warriner, 1955.

<sup>2</sup> Presidential Address, 15th Conference of the Indian Society of Agricultural Economics, D. R. Gadgil, 1954.

<sup>3</sup> "Co-operative Farming: Views and Reviews," M. L. Dantwala, *Indian Economic Journal*, July 1957.

plements, more fertilisers and more irrigation. Thinking in terms of these technical improvements would yield far better results than merely concentrating on structural reorganisation. The main point here is that if through some sort of service co-operatives, all these improvements could as well be availed of, to family-operated farms, there are no grounds to go in for co-operative farming.

### III

Certain broad lines of approach suggest themselves now. Our land system is rooted in the past. The conception of a break with the past can, of course, be a powerful stimulus in national life. But if the approach is to be realistic enough, it should be remembered, that in agriculture there cannot be any immediate break with the past. Continuity has been essence of its growth. Any fundamental change, if it is to come, has to be ushered in, necessarily, by stages and slowly. For us the maintenance and increase of agricultural production has now become quite literally a matter of life and death. If the Government wish to break with the past they must find ways and means of doing so which will increase the incentives to produce more and invest more in the land. From these points of view, to repeat the crux of our argument, the family farm is capable of giving a performance comparable to the best co-operative farm. Again family farming is in tune with the real aspirations, habits and traditions of the farmers.

It is against this fundamental fact that a realistic land policy has to be projected. The *long-term* aim of such a land policy would therefore be the creation of conditions in which peasant families own and operate some kind of an 'economic unit'. In whatever way this economic unit or basic holding may be defined, it is obvious that not all the families in the agricultural sector could be given such holdings now. Hence the problem forces some sort of *ad hoc* solution, which can be broadly formulated somewhat as follows :

Suppose a basic holding is described as a holding, which under the existing conditions of techniques, provides full employment for a family of average size working with such assistance as is customary in agricultural operations. More broadly viewed, it may become necessary to integrate it with livestock also. Hence the concept boils down to the area of land which is sufficient to absorb, in given conditions of techniques and type of farming, the labour of an average farm family working with a pair of bullocks. This description is hazarded merely to suggest the broad lines of approach and the insistence here is not so much on technical optimum as on a subsistence minimum. Taking the village as a unit of planning, the first step would be to treat this basic holding as the "floor" to be applied. Those who are cultivating holdings above this floor, therefore, need not be disturbed. It is also equally clear that those who have holdings *smaller* than the floor can no longer continue to exist as independent units of operation. It is precisely here that the co-operative farming fits in the picture most appropriately. Pooling all the holdings of these small farmers, they should be regrouped into as many basic holdings as possible.

Again, in the context of the present conditions, it seems necessary to impose a "ceiling" on holdings at as low a level as possible. The point is that no family should be allowed to carry on a substantially large size of agricultural enterprise

mainly with the help of permanent farm servants. Viewed from this perspective one can even go to the extent of suggesting that the ceiling should be as low as, say, twice or thrice the basic holding. The surplus land acquired from the bigger cultivators, after the application of some such standard of ceiling, can again be regrouped into some basic holdings.

On these reconstituted basic holdings, both from the land derived by the application of the floor and the ceiling, the next problem would be to rehabilitate all those removed farm holdings smaller than the floor. Here it seems desirable to equitably distribute these families amongst the total number of basic holdings. Assuming for purposes of analysis, that four families get one basic unit, the proposal then would be to treat that farm as an independent co-operative farm. There would therefore be as many co-operative farms as the total number of basic holdings formed after this process of reorganisation and regrouping.

Such an arrangement may be said to have two distinct merits. The first is that the basic holding itself remains a unit of operation in the co-operative. The number of families in each co-operative farm is so small that the personal link will continue to exist even in the changed situation. Moreover co-operative farms on such a very small scale may not raise any administrative or managerial problems that large-sized co-operatives are sure to. Small farms are simple to operate and therefore more practicable.

Secondly, by this process of regrouping the disguised unemployment on land will be brought into the open. In fact the only justification for retaining four families on a basic holding, where only one family would be sufficient, is that there are no other alternative avenues of employment for the three families which can be regarded as a clear "surplus". Thus their employment on land is a kind of relief employment and their share of income from the land could at best be regarded as unemployment dole. Nevertheless it should be stressed that widespread disguised unemployment is *not* a good substitute for visible unemployment. Overt unemployment attracts attention of the Government and the public. Moreover, this process also promotes mobility in so far as these surplus families are now more free and able to take up work outside the farm, if it is made available to them. It is needless to recollect that the disguisedly unemployed families are in a way tied to the land and may not therefore be able to avail themselves of such employment, unless it is specially designed to suit them. It seems therefore better that such a disease of the body economic is brought out and adequately dealt with rather than suppressed and allowed to poison the vitals of rural economic life. "The only way to break the vicious circle of surplus labour, low incomes and concealed unemployment in agriculture is to make the unemployment explicit."<sup>4</sup> The long-term implications of policy are therefore clear enough : the three surplus families now placed on each basic holding need to be siphoned off from each co-operative farming society, so that ultimately the remaining family becomes the owner of the holding.

For the purpose of purchase of seeds, fertilisers, use of implements, etc., there may be a service co-operative for each village. The independent co-operative farming societies as well as the peasant proprietors could benefit from the service co-operative.

4 Buchanan, Norman, S: *Approaches to Economic Development*, p. 243.

The role that the state has to play in such a comprehensive programme becomes all the more important.

Clearly the process of regrouping of holdings and allocating them to rural families involves a great deal of comprehensive and detailed planning. Such a programme can only succeed not merely with the State aid and guidance but also with the active State participation and partnership. For instance, while dispensing with some of the owners, the State may have to pay initially the required compensation. It may also have to provide a substantial part of the capital to the individual co-operative farming societies.

In fact one of the important problems of Indian agriculture is how to spread the techniques of the productive tenth to the unproductive nine-tenth of the farmers. Thus there is the need for an integrated approach through a comprehensive programme, including opportunity of ownership, supported by other measures like credit and marketing already under way and agricultural education and extension, etc. In effect it is a policy of State assistance to farmers through a variety of government services. The State can, in conjunction with the co-operatives, also attempt to increase the employment content of land and to provide additional non-farm employment opportunities. Thus State participation seems to be almost indispensable for the successful functioning of the co-operative farms because it is the small farmers who are not economically strong that constitute the co-operatives. This is, however, merely during the transitory stage. As we have emphasised earlier the ultimate aim would be to promote peasant proprietorship and when the peasants become sufficiently strong in this sense, the State can gradually withdraw itself from the picture.

#### IV

The main lines of approach can now be summed up. The starting point of argument is that there are no compelling grounds for adopting co-operative farming as the universal pattern of cultivation in India. If family farms can do all that the co-operatives are expected to, given the proper direction and conditions, there are sufficient reasons not merely for the retention of family-operated farms but also for forming a long-term policy aiming at the promotion of general peasant proprietorship. However, palpably, uneconomic farms cannot be allowed to continue in any programme of rapid economic development. It is precisely here that the co-operative type of farming fits in the picture most appropriately. In organising these farms on co-operative lines, the point of operation should, as far as possible, be of the same size as the family farm. This smallness of the size of the co-operative farm makes it simple to operate and therefore more practicable. Thus the co-operative pattern is visualised only as a transitory arrangement which can be dispensed with when as the tempo of development increases, surplus labour will be drained away, thereby creating in the rural sector a class of peasant proprietors. Lastly, if this comprehensive programme is to succeed State direction, aid and participation is almost indispensable, at least in the initial stages.

# A NOTE ON CURRENT SURVEY INTO SOME ASPECTS OF CO-OPERATIVE FARMING IN WESTERN U.P. AND THE PUNJAB

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Co-operative farming has been suggested as one of the institutional arrangements for the agrarian reconstruction of the country. There has been considerable debate on the topic, polarisation of views—enthusiastic support to objection on principle. The problem has been debated and discussed from the political, sociological and economic angles. Even though the feelings have been intense, arguments terse and categorical and views conclusive on both sides, they have either been theoretical or general in their contents. Whenever illustrations have been used by either sides they have pertained to conditions obtaining in foreign countries. Indian data has been conspicuously absent partly due to the fact that there are very few farming co-operatives functioning over a period of time.

By the end of the First Five-Year Plan period (1951-56) the country had only 1,357 farming co-operative societies. The emphasis on the development of co-operative farming during the Second Five-Year Plan is not free from controversy. Hence it was decided to study a few of the farming co-operatives located in the region of western U.P. and the Punjab, with the purpose to obtain relevant data, which may lead to certain objective conclusions and may resolve the controversy to some extent.

Consequently we are trying to look for details regarding certain controversial issues and provide empirical evidence wherever possible, for future discussions. These mainly resolve to the following:

- (a) Productivity per man.
- (b) Productivity per acre.
- (c) Cost of production per acre, of certain crops.
- (d) Costs of various farm operations.
- (e) Labour requirements.
- (f) Displacement of family labour, if any.
- (g) System of farming.
- (h) Land utilization.
- (i) Crop pattern.
- (j) Land improvement.
- (k) Techniques and principles of farming.
- (l) Supervisory cost.
- (m) Division of work.
- (n) Distribution of work.
- (o) Measurement of work.
- (p) Size of business and relationship with supervisory cost.
- (q) Role of human factor in farming co-operative *vis-a-vis* in family farming in agricultural production.

The location of genuine agrarian co-operatives has been a most difficult and arduous task. The P. E. O. study reveals that by and large most of the farming societies fall into two categories whose interests were extremes based on varied motives. The group motivations are primarily connected with tenancy and agrarian reforms. The land holders were motivated to form co-operatives in order that they might successfully counter tenancy reform in their States, and most of the rest formed agrarian co-operatives so that they might be able to take timely advantage of Land Utilisation Act or Waste Land Reclamation Acts in their respective areas.

The following steps were taken by us to locate genuine farming co-operatives from which samples for investigation could be chosen.

We were able to obtain a list of farming co-operatives registered in western U.P. from the Deputy Registrar of Co-operatives (Farming), Uttar Pradesh. Similar lists were made available by Assistant Registrars of Co-operatives for their respective districts in the Punjab. The total number of farming co-operatives for western U.P. was 37 and the same for the Punjab was 148—in all 185. Out of this we dropped those who by their nomenclature suggested themselves as better farming societies. By this process of elimination we were left with a list of 135 societies and a proforma was sent to each of them. This was followed up by reminders as well as personal visits to the district headquarters where the responses were relatively poorer. In addition to this, the Assistant Registrars of Co-operatives in each district of the Punjab were individually requested to help us with details regarding farming co-operatives in their region according to the proforma. Ultimately, at the end of nearly three months we have been able to locate 124 farming co-operatives in the Punjab where land has been pooled and is managed as one unit and a total number of 16 only for the same in western U.P.

The data so collected have been systematised and tabulated and are set out in Tables I to VI. They reveal the following:

The earliest of the societies is only 8 years old in the case of U.P. and 7 years old in the Punjab. The year by year numbers of registration does not indicate any definite trend of upward rise excepting in the case of the Punjab they seem to have looked up during 1954, 1955 and 1956. Thus no definite relationship can be established between the intensification of efforts on the part of the Government and the promotion and registration of farming co-operatives on the other, as in 1957 the number of registration was only 12 as against 25 for the same during the year 1956.

As regards man-land ratio the following figures are extremely interesting. The total membership of 124 societies in the Punjab is 1,817 and the total acreage for the same is 28,634 and this gives us a man-land ratio of roughly 1 : 16 which compares favourably with the provincial average of 1 : 15. Table III which gives the distribution of societies according to size of the farm and the number of members for the Punjab region is very conclusive as regards relationship between size of business and man-land ratio in each farm. For, we find that in the smallest size of business the man-land ratio is 1 : 2 and the same for the large sized farms

is 1 : 40. Further, between the two extremes there is a steady trend in spite of the fact that group totals for both acreage as well as membership have not registered any such steady trends.

As regards irrigation facilities, the farms seem to be in an advantageous position. 63.4 per cent of the total area is under irrigation. Here again it may be pointed out that in the case of 22 societies, even though there exist irrigation facilities, they have failed to record the area under irrigation. Hence these have been omitted. Without hazarding any guess, it may be assumed that the extent of irrigation may be anywhere between 65 to 70 per cent of the total area. This seems to be an exceptionally favourable condition.

The need and urgency of consolidation work as well as the magnitude of the work that awaits immediate attention is evident from the data set out in Table V. Out of a total of 124 farms only 29 are situated in one block each. The rest are divided into more than one block and some have as many as seven blocks. The situation is further worsened by the fact that as many as 30 farms have more than seven blocks with all the attendant difficulties of fencing, supervision and working and day to day management.

The imperative need for regular audit is clear from Table VI. 25 societies are not audited and for 17 societies audit classification is not available. Regular audit has an important part to play in the regular management and functioning of the farming co-operatives. Proper audit ensures proper accounting, calls for honesty and integrity of a high degree on the part of the management. At the experimental stage its value is incomparable as valuable data could be had from properly maintained registers, for analysis and future guidance. The neglect on the part of the audit staff as well as audit departments has resulted in the lack of proper accounting and book-keeping in most of the societies.

As against the above, the condition in western U.P. is not very different except in the case of irrigation where the percentage of irrigated land in the total acreage of 16 co-operatives is only 35.3 per cent.

The actual survey may be divided into two parts. Part one of the survey is primarily designed to elicit information of a general nature such as organisation and management of the societies, rights and liabilities of members, ownership dividend, income distribution, assets and liabilities, etc., with the aid of a detailed questionnaire from 6 farming societies in the Punjab and 4 in the western U.P.

The second part of the survey consists of an enquiry into the working of the same farms, on the lines of survey method of farm management investigation for which detailed schedules have been prepared. At this stage it is envisaged to go into more detailed investigation into certain peculiar or specific characteristics of the individual farms. This is necessary as we have decided to select farms through purposive random sampling method so that finally we may have included in our study each farm with one or more of the following specialities:

Sma'. Farm . . . Large Membership  
Large Farm . . . Large Membership

Large Farm . . . Small Membership  
Small Farm . . . Small Membership  
Farms with cent per cent irrigational facilities  
Farms with mechanised cultivation  
Farms operated with complete manual labour

But it must be frankly admitted here that the selection of cases for detailed investigation has had to be deferred till the completion of a semi-detailed intermediate enquiry and at least twenty visits to farms which have been tentatively selected with the objectives mentioned above. This step was found not only necessary but also unavoidable since the very existence and functioning of genuine co-operatives in reality is in doubt. The information so far received from the field has not been very encouraging either.

In the meantime the questionnaire was tested pending final investigation, by investigation into the working of the Bhatia Co-operative Farm, situated in the District of Barielly in the Uttar Pradesh. We propose to detail below some of the experiences.

All the members are displaced persons from the West Punjab. They have strong sociological ties. Most of the members are of one particular caste and are closely knit together. There are altogether 33 members holding 64 shares. Roughly each share is of the value of 11 acres of land. It is not obligatory for members to work but it is obligatory on the part of the society to provide employment. Members can opt to leave the farm, but they cannot take away their shares of land. They can only get the requisite value fixed per share.

The Executive Committee of the society consists of President, Vice-President, Honorary Secretary and three members. A paid manager is appointed. In this particular case the secretary happens to be the paid manager. He assigns work on the basis of consultations and decisions arrived at the general meeting. The manager has wide powers to suitably amend or change decisions of the annual meeting so as to meet the emergency situations caused by crop failure owing to drought, excessive rainfall, etc. Generally the next days' programme is discussed in the evening when all assemble at one place just as a matter of routine.

In this particular society people are keenly feeling the need of the expansion of employment opportunities through subsidiary industries even though they use a hired labour gang of 18 to 20 members more or less on a semi-permanent basis. In addition, casual hired labour is employed during busy seasons of sowing and harvesting of crops. The manager feels that the development of subsidiary industries will be able to provide diversification of work, choice in employment and will ultimately be able to absorb the children of the members. But they can only undertake such expansion, if electricity is provided. The following enterprises have been planned out—small workshop, oil crusher, hosiery, dairying and preservation and canning of vegetables.

Fixed monthly remuneration according to the type of work done is paid to members and to others payment is done on wage rate basis. The manager, tractor driver, mechanics are paid higher than the rest who do the rest of the farm work.

The usual monthly remuneration of the farm worker used to be Rs. 55 per month which has recently been raised to Rs. 70 as against the daily wages of Rs.  $1/4$  to Rs.  $1/6$  prevalent in the neighbourhood. In addition, the members enjoy the following benefits.

Free education for children, free medical care for the family, free vegetables and milk at a reduced rate of annas four per seer are provided by the society. The members are entitled to an annual leave of 15 days. The non-member daily labourers who are retained on a semi-permanent basis are also entitled to some annual leave plus the benefits of free medical attendance and vegetables.

The rate of ownership dividend is paid at the rate decided in the general meeting of the members. It has always been on per acre basis (flat rate). The rate is always much higher than the prevailing rent of land. In 1956 it was Rs. 25 per acre. In addition to this, the members get free of cost 2 maunds of wheat, 15 seers of paddy and 5 seers of *Kabli Chana* (gram) per each share.

The members of the society are highly critical of the government officials and they have a number of suggestions for the consideration of the Government. The average cost per acre, cost per maund, produce per acre, market rate per maund at the harvesting time and net return to the farm per acre with regard to paddy, wheat, gram, gochani and sugarcane have been worked out and are set out in Table VII. On the basis of the data available it may be stated that the farm in spite of handicaps has worked fairly successfully.

The reasons for the successful working of the society may be summed up as follows:—(i) agricultural background of members: (ii) strong sociological ties; (iii) advantages of refugee loans, the rate of interest on which is only 3 per cent; and (iv) the advantage of having a qualified and experienced manager-cum-secretary.

TABLE I—DISTRIBUTION OF CO-OPERATIVE SOCIETIES ACCORDING TO THE YEAR OF ESTABLISHMENT

Year of establishment	PUNJAB		UTTAR PRADESH	
	No. of Societies	% to total	No. of Societies	% to total
1949	..	..	2	12.5
1950	4	3.2	2	12.5
1951	9	7.3	3	18.7
1952	5	4.0	3	18.7
1953	10	8.1	1	6.3
1954	30	24.1	3	18.7
1955	25	20.2	1	6.3
1956	25	20.0	—	—
1957	12	9.7	1	6.3
N.A.	4	3.2	—	—
Total	124	100.0	16	100.0

TABLE II—DISTRIBUTION OF SOCIETIES ACCORDING TO THE SIZE OF THE FARM AND TYPE OF MANAGEMENT

Size of the farm in acres	PUNJAB						UTTAR PRADESH				
	Land Pooled				Total No. of Societies	Land Pooled				Total No. of Societies	
	Yes		No	Yes		No					
	Jointly cultivated and managed	Not jointly cultivated and managed		Jointly cultivated and managed			Not jointly cultivated per household				
0— 49	..	..	1	—	—	1	—	1	—	1	
50— 99	..	..	12	1	—	13	1	1	1	3	
100—149	..	..	38	2	—	40	—	—	—	—	
150—199	..	..	18	1	1	20	—	—	—	—	
200—249	..	..	13	1	—	14	2*	—	—	2	
250—299	..	..	7	1	—	8	2	—	1	3	
300—349	..	..	12	—	—	12	1	—	—	1	
350—399	..	..	3	—	—	3	1	—	—	1	
400—449	..	..	3	—	—	3	—	—	—	—	
450—499	..	..	—	—	—	—	1	—	—	1	
500 and above	..	..	9	—	1	10	3	1	—	4	
TOTAL	..	..	116	6	2	124	11	3	2	16	

\* One society is having land at 2 places and at one place it is jointly cultivated and managed while at other place it is not jointly cultivated and managed.

TABLE III—DISTRIBUTION OF SOCIETIES ACCORDING TO THE SIZE OF THE FARM AND THE NUMBER OF MEMBERS

Size of the farm in acres	PUNJAB						UTTAR PRADESH					
	No. of members			Total No. of Societies			No. of members			Total No. of Societies		
	10-15	15-20	20-25	25 and above	Total No. of Societies	Total amount of land (acres)	10-15	15-20	20-25	25 and above	Total No. of Societies	Total amount of land (acres)
0-49	..	..	1 (18)	—	1 (18)	34.0	1	—	—	—	1	30.0
50-99	..	..	5 (78)	1 (20)	13 (182)	960.9	1	1	—	1	3	245.0
100-149	..	..	32 (379)	—	40 (509)	4648.5	—	—	—	—	—	—
150-199	..	..	12 (150)	—	20 (283)	3254.8	—	—	—	—	—	—
200-249	..	..	8 (104)	1 (23)	14 (212)	3031.5	—	1	1	—	2	432.0
250-299	..	..	3 (40)	2 (44)	8 (133)	2114.0	2	—	—	1	3	750.0
300-349	..	..	9 (107)	—	12 (151)	3817.4	—	—	—	1	1	325.0
350-399	..	..	1 (14)	1 (24)	3 (53)	1118.0	—	1	—	—	1	359.0
400-449	..	..	1 (14)	—	3 (53)	1266.0	—	—	—	—	—	—
450-499	..	..	—	—	—	—	—	1	—	—	1	480.5
500 and above	..	..	5 (59)	2 (36)	10 (223)	8389.0	—	1	—	3	4	6083.0
Total	..	..	78 (951)	7 (171)	124 (1817)	28634.1	4 (50)	5 (33)	4 (20)	6 (223)	16 (376)	8704.5

Figures in brackets indicate the actual number of members.

TABLE IV—DETAILS OF IRRIGATED LAND

Size of the farm in acres	PUNJAB					UTTAR PRADESH				
	No. of Societies	No. of Societies having irrigated land	Total land in the group	Area irrigated in acres	Percentage of irrigated land to total land	No. of Societies	Total land in the group	Area irrigated in acres	Percentage of irrigated land to total land	
0—49	..	1	34.0	15.0	44.1	1	30.0	—	—	
50—99	..	13	960.9	567.0	59.0	3	245.0	66.0	26.9	
100—149	..	40	4648.5	2649.0	57.0	—	—	—	—	
150—199	..	20	3254.8	2046.6	62.9	—	—	—	—	
200—249	..	14	3031.5	1540.0	50.8	2	432.0	100.0	23.1	
250—299	..	8	2114.0	1757.0	83.1	3	750.0	500.0	66.7	
300—349	..	12	3817.4	2207.0	57.8	1	325.0	100.0	30.8	
350—399	..	3	1118.0	1028.0	91.9	1	359.0	359.0	100.0	
400—449	..	3	1266.0	390.0	30.8	—	—	—	—	
450—499	..	—	—	—	—	1	480.5	150.0	31.2	
500 and above	..	10	8389.0	5961.0	71.5	4	6083.0	1800.0	29.6	
Total	..	124	28634.1	18160.6	63.4	16	8704.5	3075.0	35.3	

5 societies do not have irrigation facilities. For 22 societies in Punjab, though there are irrigation facilities the area under irrigation is not available. Therefore, the number is not included under No. of societies having irrigated land. \* One society is having land at 2 places and at one place, land is irrigated but the area is not available, while at the other place land is not irrigated.

TABLE V—DISTRIBUTION OF SOCIETIES ACCORDING TO THE SIZE OF THE FARM AND PHYSICAL LAYOUT OF THE FARM

Size of the farm in acres	PUNJAB										UTTAR PRADESH									
	Physical layout of the farm in blocks										Physical layout of the farm in blocks									
	One block	Two blocks	Three blocks	Four blocks	Five blocks	Six blocks	Seven blocks	Many blocks	N.A.	Total	One block	Two blocks	Three blocks	Four blocks	Seven blocks	Many blocks	N.A.	No. of Societies	Total	No. of Societies
0—49	..	..	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	1	1	1
50—99	..	..	1	1	1	—	—	—	7	2	13	—	1	1	—	—	—	1	3	3
100—149	..	..	9	7	4	2	2	10	4	40	—	—	—	—	—	—	—	—	—	—
150—199	..	..	3	2	2	1	1	—	5	6	20	—	—	—	—	—	—	—	—	—
200—249	..	..	5	3	1	1	—	—	2	2	14	2*	—	—	—	—	—	—	2	2
250—299	..	..	2	1	1	3	—	—	—	1	8	—	—	—	1	1	—	3	3	3
300—349	..	..	2	2	—	1	1	—	4	2	12	1	—	—	—	—	—	1	1	1
350—399	..	..	2	—	1	—	—	—	—	—	3	1	—	—	—	—	—	1	1	1
400—449	..	..	1	1	—	—	—	—	—	1	3	—	—	—	—	—	—	—	—	—
450—499	..	..	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	1	1
500 and above	..	..	4	1	1	1	1	—	2	—	10	—	—	1	2	1	—	4	4	4
Total	..	..	29	18	11	9	4	2	2	30	19	124	5	1	2	3	2	1	2	16

N.A. denotes: not available.

\* One society is having land at 2 places and at one place it is pooled into one block but at the other place the number of blocks are not available.

TABLE VI—DISTRIBUTION OF SOCIETIES ACCORDING TO THE TYPE OF AUDIT CLASSIFICATION

Size of the farm in acres	UTTAR PRADESH						PUNJAB					
	Audited			Total No. of Societies	Audited			Total No. of Societies				
	Yes				No	Yes			No			
	'C' classification	'D' classification	N.A.			'B' classification	'C' classification			N.A.		
0—49	..	—	—	1	—	1	—	—	1	—	1	
50—99	..	1	—	1	1	3	—	4	7	2	13	
100—149	..	—	—	—	—	—	2*	18	10	10	40	
150—199	..	—	—	—	—	—	1	5	8	6	20	
200—249	..	—	—	2	—	2	2	6	4	2	14	
250—299	..	2	1	—	—	3	1	2	5	—	8	
300—349	..	1	—	—	—	1	—	4	4	4	12	
350—399	..	—	—	1	—	1	—	—	2	1	3	
400—449	..	—	—	—	—	—	1	1	1	—	3	
450—499	..	—	—	1	—	1	—	—	—	—	—	
500 and above	..	—	1	2	1	4	—	5	5	—	10	
Total	..	4	2	8	2	16	7	45	47	25	124	

\* One is 'A' classification.

TABLE VII

Crop					Average cost per acre (Rs.)	Cost per maund Rs.	Produce per acre (mds.)	Average market rate per md. at the harvesting time (Rs.)	Net return to the farm per acre (Rs.)
Paddy	..	..	..	..	62	5/8/-	13	10/2/-	69/10/-
Wheat	..	..	..	..	126	9/15/3	13	11/13/-	28/6/-
Gram	..	..	..	..	67	9/10/-	12	10/-	53/-/-
Gochani	..	..	..	..	63/1/-		10	10/-	37/-/-
Sugarcane	..	..	..	..	201/10/-	-/10/9	320	1/7/-	215/-/-

# THE EXPERIENCE OF CO-OPERATIVE FARMING IN THE PUNJAB

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An important problem before the country since independence has been the decision about the future pattern of our agrarian economy. We have to decide how far the chief handicaps of the small farmer in India, viz., small and fragmented holdings, lack of capital, illiteracy, unfavourable land tenures, weak bargaining power and the problems of live stock, farm equipment, seed, manure, irrigation, transport, credit, crop pests, soil erosion and subsidiary occupation can be eliminated by co-operative farming and how far individual peasant farming helped by service co-operatives can improve the situation.

## *Objects of the Study*

The importance of a close study of experiments in co-operative farming is recommended by the Co-operative Planning Committee, the Congress Agrarian Reforms Committee, and the Planning Commission. But the best way of determining the efficiency of co-operative farming was to compare the accounts and working of some co-operative farms and individual farms under more or less similar conditions. It was with this objective that "A comparative study of co-operative farming and individual farming in the Punjab" was undertaken by the author in the year 1953.

## *Method of Study*

Ten co-operative farms in different districts in the Punjab were selected under the advice of the Registrar of Co-operative Societies, Punjab, for close study. Only co-operative farms with some standing, where land was actually pooled and which were functioning as co-operative farms and not merely registered in name were selected. According to the office of the Registrar of Co-operative Societies, these were the comparatively more successful societies. For each co-operative farm, five individual farms were selected in the same village or adjoining villages for a comparative study. Those individual farmers were selected, who were willing to give full information about the accounts and working of their farms. Subject to this condition, the farms selected were of varying sizes and cultivated under different systems of tenancy like peasant proprietorship, share tenancy and cash rent. The villages were visited twice after the *Kharif* 1953-54 and *Rabi* 1953-54 had been collected. The methods of observation, personal interview and group interviews were used for the collection of data. Detailed notes were taken at the time of these interviews. The proformas and schedules used by the Board of Economic Enquiry, Punjab for collecting data for "Farm Accounts in the Punjab" were used for recording the data at the time of the interviews. The average Punjab cultivator does not maintain accounts of his income and expenditure, but though illiterate, he has a wonderful memory about the area under different crops and their yields. As the author comes of a peasant family in the Punjab, he had no difficulty in establishing rapport with the cultivators and collecting data from them. It is not possible to summarise the conclusions of these ten case studies in the course of a brief paper like this. The present investigation is, therefore, limited

to the Gagra Co-operative Farming Society Ltd., Gagra, and five individual farmers in the same village. Gagra is situated at a distance of about  $2\frac{1}{2}$  miles from the Tehsil town of Jagraon in the Ludhiana District.

#### ORIGIN

The society was registered in December, 1950 with 16 members owning 200 standard acres, all of whom were displaced landholders from the Lyallpur District in Pakistan. The main motives for starting the society were (i) a desire on the part of one of the leading members to get the benefit of the concessions given by the Government to co-operative farming societies; (ii) to get a substantial loan for the purchase of tractor and bullocks for breaking the land which had been left uncultivated for some years, and installation of tube wells for irrigation; and (iii) a realisation on the part of the members that individually it would not be possible to bring the land under cultivation with their meagre resources.

#### *Terms of Agreement between the Society and the Members*

(1) Land was handed over to the society for a period of ten years, before which a member could not get his land back.

(2) At the end of ten years, if the society was to be liquidated, members would not have any lien on a particular plot of land, but there would be a fresh *annawari* valuation of land for distribution among the members. This provision was entered so that the members might not be particular about permanent improvement on their respective plots of land.

(3) Members were to get upto a maximum of *Nisaf Batai* as rent from the society.

#### *Resources*

An amount of Rs. 10,000 was raised as share capital at the rate of Rs. 50 per acre. The maximum credit limit of the society was fixed at Rs. 15,000 by the Registrar of Co-operative Societies, Punjab and the society got a loan of Rs. 12,000 to start with from the Jagraon Co-operative Union at the rate of  $4\frac{1}{2}$  per cent. A concession of 1 per cent was given to the society as the Union generally charged  $5\frac{1}{2}$  per cent for such loans. An amount of Rs. 16,000 was raised as deposits from members and non-members related to the members, at the rate of 7 per cent per annum. In the beginning, the total working capital amounted to Rs. 38,000.

#### *Farm Operations*

Farming operations were started in March 1951 and were carried on with the help of permanent as well as hired labourers. Eight family workers were engaged on the farm at Rs. 45 per month. Out of them one was the managing director, two were tractor drivers, one engine driver, three ploughmen and one general supervisor. All of them were paid the same monthly wages, irrespective of the nature, quality and hours of work. Normally this arrangement would not be satisfactory and there should be some system of work-day units. But it was pointed out by the members that if the earnings of the family members for the work of

the farm differed, it would create ill-feeling among them. There were four other permanent labourers engaged at Rs. 60 per month. If a labourer absented himself for one day his pay was deducted from his monthly wages. But if he did not absent himself for more than 15 days in the year, he got a refund in pay for that period in the form of a bonus. If a labourer was never absent, he got a bonus equal to 15 days pay.

For harvesting of wheat and separating the grain from the straw, the casual labour was paid at the rate of 3.5 seers per maund. For picking of cotton, casual labour whether provided by the family members or outsiders was paid at the rate of Rs. 1.50 per maund. The income of the members was supplemented to the extent of about Rs. 100 per year, on account of picking of cotton by the women-folk. Hoeing was sometimes done on a contract basis.

The society used a Fordson major tractor 28-32 H.P. which was purchased in August 1951 along with accessories, a plough, and a trailer. Two pumping sets, 10 H.P. each and one 4 H.P. engine for chaff-cutting were also installed at a total cost of Rs. 7,000. In addition, six bullocks were purchased at a total price of Rs. 3,500 and an amount of Rs. 2,000 was spent on the farm house, store room and cattle shed.

#### ADMINISTRATION

According to the bye-laws, the management of the farm was the responsibility of the general body and the executive committee. One of the members of the society, who was an inspector of co-operative societies supervised the working of the society as its honorary secretary and maintained the accounts for the first year. He had a hold on most of the members of the society and the society was organised under his leadership. But his chief difficulty was that he could attend to the work of the society only on week-ends and other holidays. His experience and knowledge of the working of co-operative societies were a great asset to the managing committee of the society. For 1952-53 the society appointed a manager at Rs. 125 per month. This man was a sub-inspector of co-operative societies whose services were lent to the society. But he was recalled by the Government after a few months. For 1953-54 again the honorary secretary maintained the accounts, but he emphasized the need of a whole time paid manager who should not be a member, for the successful working of the society.

#### *Particulars of Five Individual Farms*

Holding A—36 standard acres—53 acres by measurement—self cultivated.

Holding B—17 standard acres—25 acres by measurement—self cultivated.

Holding C—15.25 standard acres—21 acres by measurement. The owner cultivated this holding with the help of one tenant who provided one bullock, one adult labourer (self), 50 per cent of seed, and manure and half of the remaining cost of cultivation, including water rates. In return he was to get one-fourth of the gross yield of crops.

Holding D—13.5 standard acres, cultivated by a tenant on *batai*, half of the gross produce being the share of the tenant. The landlord paid land revenue in full, half of the water rates and provided half of the manure.

Holding E—4 standard acres—5.5 acres by measurement. In addition, an area of three standard acres—4 acres by measurement was taken on an annual total cash rent of Rs. 270. Holding E was the smallest holding in the village, but with four acres of rented land it approaches the size of an economic holding, which is ten acres of partly irrigated land in Ludhiana District.<sup>1</sup>

A detailed study has been made of the input and output of these farms for the agricultural year 1953-54. The output consists of the value of all the crops produced, whether paid out as wages in kind, consumed at home, sold or disposed off in any other way. The input includes rent of land, human labour (family and hired) bullock labour, seed, manure, water rates, depreciation of implements, interest on capital, etc. Value of family labour has been imputed at the prevailing market rates for hired labour. Net income is calculated by subtracting input from output.

TABLE I—PATTERN OF CROPPING—PERCENTAGE OF THE TOTAL CROPPED AREA UNDER DIFFERENT CROPS

Name of crop	Co-operative farm	A	B	C	D	E
Wheat and Gram	56.5	47.9	51.5	26.7	48.7	31.6
Cotton	28.3	20.8	11.7	16.0	20.5	15.8
Maize	3.4	2.1	9.7	13.3	9.0	5.2
Fodder Crops	10.7	29.2	23.4	44.0	21.8	42.1
Miscellaneous	1.1	..	3.7	..	..	5.3

Cereals, cotton and fodder crops were the main crops in this area. The co-operative farms had a higher percentage of cropped area under wheat and cotton than any of the individual farms. This was possible, as it needed a smaller area under fodder crops. As result of partial mechanization, a comparatively smaller number of bullocks had to be maintained. Although the percentage of area under fodder crops was less than half of that in holding A, B and D and about 1/4th of that in holding C and D, fodder was supplied to the members for their milch cattle. In holding C a higher percentage of the cropped area was under fodder, as the bullocks as well as milch cattle of both the landlord and the tenant had to be fed. In the case of holding E, the peasant maintained a minimum unit of two bullocks, in addition to one buffalo and two non-working cattle.

TABLE II—YIELD PER ACRE (IN MAUNDS) OF IMPORTANT CROPS IN VILLAGE GAGRA

Name of the crop	Co-operative farm	A	B	C	D	E	Average for individual farms
American Cotton (irrigated)	17.5	17.5	12.0	13.3	15.0	12.3	15.4
Maize (irrigated)	20.0	14.0	22.0	18.0	18.3	18.0	18.8
Wheat (irrigated)	23.0	19.3	21.5	18.5	16.0	16.7	18.5
Wheat and Gram (unirrigated)	11.7	7.0	9.0	10.0	7.7	—	7.9

<sup>1</sup> Estimation of Size of Economic Holding, in the Punjab—Economic and Statistical Organisation, Government of Punjab Publication No. 6, p. 3.

Holding E—4 standard acres—5.5 acres by measurement. In addition, an area of three standard acres—4 acres by measurement was taken on an annual total cash rent of Rs. 270. Holding E was the smallest holding in the village, but with four acres of rented land it approaches the size of an economic holding, which is ten acres of partly irrigated land in Ludhiana District.<sup>1</sup>

A detailed study has been made of the input and output of these farms for the agricultural year 1953-54. The output consists of the value of all the crops produced, whether paid out as wages in kind, consumed at home, sold or disposed off in any other way. The input includes rent of land, human labour (family and hired) bullock labour, seed, manure, water rates, depreciation of implements, interest on capital, etc. Value of family labour has been imputed at the prevailing market rates for hired labour. Net income is calculated by subtracting input from output.

TABLE I—PATTERN OF CROPPING—PERCENTAGE OF THE TOTAL CROPPED AREA UNDER DIFFERENT CROPS

Name of crop	Co-operative farm	A	B	C	D	E
Wheat and Gram	.. .. 56.5	47.9	51.5	26.7	48.7	31.6
Cotton	.. .. 28.3	20.8	11.7	16.0	20.5	15.8
Maize	.. .. 3.4	2.1	9.7	13.3	9.0	5.2
Fodder Crops	.. .. 10.7	29.2	23.4	44.0	21.8	42.1
Miscellaneous	.. .. 1.1	..	3.7	..	..	5.3

Cereals, cotton and fodder crops were the main crops in this area. The co-operative farms had a higher percentage of cropped area under wheat and cotton than any of the individual farms. This was possible, as it needed a smaller area under fodder crops. As result of partial mechanization, a comparatively smaller number of bullocks had to be maintained. Although the percentage of area under fodder crops was less than half of that in holding A, B and D and about 1/4th of that in holding C and D, fodder was supplied to the members for their milch cattle. In holding C a higher percentage of the cropped area was under fodder, as the bullocks as well as milch cattle of both the landlord and the tenant had to be fed. In the case of holding E, the peasant maintained a minimum unit of two bullocks, in addition to one buffalo and two non-working cattle.

TABLE II—YIELD PER ACRE (IN MAUNDS) OF IMPORTANT CROPS IN VILLAGE GAGRA

Name of the crop	Co-operative farm	A	B	C	D	E	Average for individual farms
American Cotton (irrigated)	.. .. 17.5	17.5	12.0	13.3	15.0	12.3	15.4
Maize (irrigated)	.. .. 20.0	14.0	22.0	18.0	18.3	18.0	18.8
Wheat (irrigated)	.. .. 23.0	19.3	21.5	18.5	16.0	16.7	18.5
Wheat and Gram (unirrigated)	.. .. 11.7	7.0	9.0	10.0	7.7	—	7.9

<sup>1</sup> Estimation of Size of Economic Holding, in the Punjab—Economic and Statistical Organisation, Government of Punjab Publication No. 6, p. 3.

The yield per acre of these crops in the co-operative farm was higher than the yield in the individual farm. Better preparation of the soil with the help of the tractor, better supply of irrigation water from the tube well than from the Persian wheels and use of sufficient manure are among the important causes of this.

TABLE III—NET INCOME IN RUPEES PER ACRE FOR 1953-54 ON THE CO-OPERATIVE FARM AND FIVE INDIVIDUAL HOLDERS IN GAGRA

Co-operative farm	A	B	C		D		E
			Land-lord	Tenant	Land-lord	Tenant	
42.55	35.45	5.84	—(14.24)	—(9.40)	99.10	2.10	—(68.30)

For the purposes of quasi-permanent allotment, all the land in Gagra was valued in terms of standard acres, for which besides area, the quality of land as determined by factors like soil, irrigation and productivity was taken into consideration. A comparison of net income per standard acre thus brings out the differences in yield as a result of efficiency of management and organisation, as the concept of standard acre eliminates some of the differences in yield due to differences in the quality of land.

TABLE IV—NET INCOME IN RUPEES PER STANDARD ACRE ON THE CO-OPERATIVE FARM AND FIVE INDIVIDUAL HOLDINGS IN GAGRA

Co-operative farm	A	B	C		D		E
			Land-lord	Tenant	Land-lord	Tenant	
65.00	52.19	8.59	—(19.61)	—(12.92)	132.19	2.78	—(92.70)

It is clear from Tables III and IV that the net income per acre and per standard acre was higher in the co-operative farm than in any of the individual holdings. The landlord of holding D was better off than he would be if he were a member of the co-operative farm. But he was getting half of the gross produce as his share, which is against the provision of the Punjab Security of Land Tenures Act, 1953 which fixes the maximum rent at 1/3rd of the value of the crop. Neither the tenant nor the landlord of holding C was meeting his costs. The position was worse with the farm E, which was the smallest of all the holdings. The tenant of holding C would be better off if he worked as a wage-earner on a farm. The landholders of holding C and E would be gainers if they joined a co-operative farm.

One of the causes of the poor return on holding C was that the landlord provided one labourer who was rather weak and the tenant who had to part with 3/4th of the gross produce as a share of the landlord, did not have the incentive to work well. The tenant of holding D was not getting an adequate return for his enterprise. But he preferred this arrangement to working as a hired wage earner, as except for the occasional interference of the landlord, he was his own master.

TABLE V—NET RETURN IN RUPEES PER FARM WORKER

Co-operative farm	A	B	C		D		E
			Land-lord	Tenant	Land-lord	Tenant	
780·10	626·33	58·4	—(199·3)	—(197·0)	—	15·0	—(46·35)

TABLE VI—NUMBER OF PERMANENT FARM WORKER PER 100 ACRES HELD

Co-operative farm	A	B	C	D	E
5·46	5·66	10·0	9·52	13·89	23·53

Only holding A with one family worker and two hired workers can stand a comparison with the co-operative farm in respect of return per farm worker and the relation of number of workers to the area of the farm. Holding B, with less than half the area of holding A has the same number of workers, two of them being family workers. The number of family workers depends upon the size of the family, and not on the size of the farm, and inflates the number of farm workers per hundred acres held in the case of small farms. For lack of alternative employment these persons remain under-employed on the farms.

TABLE VII—NUMBER OF BULLOCKS PER 100 ACRES HELD

Co-operative farm	A	B	C	D	E
2·7	7·6	16·0	9·5	16·7	23·5

TABLE VIII—AREA HELD PER PAIR OF BULLOCKS

Co-operative farm	A	B	C	D	E
73·3	26·5	12·5	10·5	12·0	9·5

The co-operative farm maintained a smaller number of bullocks as it had a tractor. Otherwise, as most of the individual holdings in the village were above the economic size, there was not much scope of economy in the number of bullocks maintained as a result of pooling of the holdings into a co-operative farm.

#### *Programme of the Co-operative Farming Society*

1. The society installed two tube-wells turning 40 acres of *Barani* land into *Chahi* land and brought eight acres of *Banjar Kadim* (not cultivated for 8 successive harvest) land under the plough. The remaining 65 acres of *Barani* land could not be irrigated as these were scattered in fragments. The members were looking forward to the consolidation of holdings in the village, to turn the entire *Barani* land into *Chahi* land by installing tube-wells.

2. The members were planning to start a dairy farm which would result in a definite improvement in the handling of milk and sanitation.

3. The society was thinking of installing hosiery machines as a cottage industry to keep the women folk occupied in their leisure hours. This is very important for the success of the co-operative farms. Unfortunately, in none of the co-operative farms in the Punjab studied by the author is there any provision for any organised subsidiary industries.

4. The society proposed to reserve about 12 acres of land for gardening and vegetable farming for the consumption of the members in order to improve their diet.

But the society failed to get any financial accommodation or technical advice from the Government for carrying on the above programme.

#### *Difficulties Experienced by the Society*

1. In the very first year the society suffered a loss of about Rs. 6,000 in the sale of cotton due to the indifference of the Department of Agriculture. The Department refused to recognize the society and as such did not give any *taccavi* loan to the society. Moreover, they failed to render any technical advice for the demonstration plots.

2. The land of the society was scattered in eight different plots. It was, therefore, difficult to keep watch over the crops.

3. The wells of the society were used in common with other individual land-holders. This stood in the way of their full utilization for irrigating the fields of the society at the proper time.

4. The maximum credit limit of the society was fixed very low at Rs. 15,000. The application for increase in the maximum credit limit was not accepted.

5. For the year 1952-53 the society had a whole time manager who was a sub-inspector of the Co-operative Department. His services were lent to the society. Although the society paid his emoluments, the Assistant Registrar wrote to the society to remove him or stand the cancellation of the society. His removal was a great loss to the society.

6. The society received a great set-back on account of the consolidation operations in the village which were completed in July 1954. The members were not allotted land at one place but at different places. This was a death-blow to the society and the members took to individual farming from the year 1954-55.

7. This co-operative farm as most of the others in the Punjab did not have any godown for storing its produce. A comparison of the rates at which the main crops were sold by the co-operative farm and the individual farmers does not show any advantage in favour of the former. The co-operative farm as well as the individual farmers sold their produce just after harvest in the Jagraon *mandi*

at practically identical prices. Actually, it was seen, that the surplus produce of the co-operative farm was directly transported from the threshing floor to the *mandi*, as there was no godown to store the produce and the society could not store the produce in the house of any member, even if one had sufficient space for stocking it. Some of the individual cultivators, however, might stock their surplus produce in their houses and sell it when the prices were favourable.

8. One of the members owning 24 standard acres left the society at the end of the first year and another member with 33 standard acres took to individual farming at the end of two years. Although the members have pledged their land with the society for a period of ten years, it was not found possible to enforce this provision, as the society could not function smoothly if it retained unwilling members forcibly and did not release the land of such members. Similar is the experience of other co-operative farming societies in the Punjab. The by-laws of all the societies make provision for a minimum number of years for which members cannot get back their land; but in practice members have been getting their land released for individual farming on leaving the society.

### *Conclusion*

The Gagra Co-operative Farming Society was one of the most successful co-operative farming societies in the Punjab. All the land of the members was pooled, and two-third of the workers on the farm were members or their dependents. The yield per acre and per man was much higher than in the case of the individual farmers in the same village, who cultivated economic holdings. But inspite of all this, after a brief period of three years, the members took to individual farming. Indifference of the Government, insufficient credit facilities, and failure of the consolidation department to allot land to the members at one place contributed to the dissolution of the society. But the most important cause was the lack of the co-operative spirit. The members realised that they were getting better returns, but they preferred to work independently on their own plots although that might mean a lower income. This is the story of most of the other co-operative farms in the Punjab, although in respect of their financial returns few of them compare with this farm. A number of co-operative farms have been registered in the Punjab since the partition. The displaced landowners had no bullocks or equipments with them, and the land allotted to them had been left uncultivated for a number of years. They needed substantial loans for the purchase of tractors, bullocks and other equipment for breaking the land and bringing it under cultivation and for the installation of tube wells and sinking of wells for irrigation purposes. But once the land had been brought under the plough the members experienced the difficulties of co-operation in the production process and took to individual farming. In the beginning the officials of the co-operative department as well as the members were very enthusiastic about the working of a new society. But generally in a period of two to three years, most of the members found it difficult to pull on together, and eventually took to individual farming; and the main concern of the co-operative department then, was the recovery of loans advanced to the society before it went into liquidation. The Standing Committee of the National Development Council which met in New Delhi about the middle of September 1957, has, under its 5 point programme to promote co-operative farming, approved of the suggestion of the Planning Commission that during the next three years

about three thousand co-operative farming experiments should be carried out. It is suggested that for every experiment in co-operative farming, a co-operative multi-purpose society should be started with different cultivators as members, in the same village or in a neighbouring village. Both the types of societies should be given equal facilities by the Government. After a couple of years, a comparative study of progress of the two types of societies and the condition of their members may be made to see which of the institutions helps to solve the problems of the small cultivators better.

### EXPERIENCE OF CO-OPERATIVE FARMING IN AN AREA OF SMALL HOLDINGS\*

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Of late, there has been much discussion on co-operative farming. The first important statement relating to co-operative farming, in recent times, is contained in the Second Five-Year Plan which reads as follows :—"The main task during the Second Five-Year Plan is to take such essential steps as will provide sound foundations for the development of co-operative farming, so that over a period of 10 years or so, a substantial proportion of agricultural lands are cultivated on co-operative lines." This was followed by the "Report of Indian Delegation to China on Agrarian Co-operatives" which has formed the basis of much controversy. Among the other statements which have appeared, special mention may be made of Otto Schiller's admirably lucid article on "Possibilities and Limitations of Co-operative Farming in India" in the *Indian Journal of Agricultural Economics*.<sup>1</sup> In his article Schiller has distinguished three types of co-operative farming, namely, (1) co-operative farming in new settlements, (2) co-operative farming in old villages, and (3) individual farming on co-operative lines. This classification helps to avoid much confused thinking on co-operative farming. In this paper, which purports to give the salient features of co-operative farming in the southern districts of Kerala, the classification of Otto Schiller has been made use of.

This study is limited to the five districts of Trichur, Kottayam, Alleppey, Quilon and Trivandrum in the Kerala State which roughly form the erstwhile Travancore-Cochin State. They have been chosen to show how far, and in what directions co-operative farming has progressed in a region where the average size of holdings is the lowest in the whole of India (It is only 2.4 acres).

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\* This study is based partly on the data collected from the office of the Registrar of Co-operative Societies, Kerala State, and partly on the replies to a questionnaire sent by the author to several of the co-operative farming societies in the Southern districts of Kerala. The author is very much indebted to the officials of the Co-operative Department, Kerala State, especially to the Personal Assistant to the Registrar of Co-operative Societies, and to the Secretaries of those co-operative farming societies who readily responded to his request. The author alone is, however, responsible for the views expressed in this paper.

1. *The Indian Journal of Agricultural Economics*, October-December issue, 1956, pp. 1-11.

## CO-OPERATIVE FARMING IN NEW SETTLEMENTS

As far as the districts under review are concerned new settlements refer mainly to forest lands (Government land) leased to co-operative societies by the State Government on a more or less long-term basis. Since no comprehensive measure of land reform has been implemented in this area, new settlement activities as a result of land reform and ceiling on holdings have not become possible. It may be further added that, even if a comprehensive piece of land reform legislation is carried out it is highly doubtful whether much surplus land will become available in view of the fact that 95 per cent of the holdings of the area are below 5 acres in size.

There are at present about 7 co-operative farming societies working in the new settlement of this area. We may distinguish two types of such societies, namely, (1) those which receive government lands on lease and allot them to members for individual cultivation and (2) those which receive land on lease and cultivate it jointly. Let us examine the working of a typical society in each class. "The Kalyar Karshaka Co-operative Society" in Kottayam District which belongs to the first category has a membership of 492 and a share capital of Rs. 9,830. The society was sanctioned 108 acres of land on lease, out of which 45 acres of land have been distributed among the members. The important point to note is the wasteful way in which this allocation has been carried out. 45 acres of land are divided among the members in about 221 blocks of 30 or 40 cents per family. Each family cultivates its plot independently. There is no co-operative effort among the members in respect of any farming operation. Evidently, this is a co-operative farming society only in a very remote sense. Now as regards the other type of co-operative farming society in new settlements, 'The Kottayam-Peermade Co-operative Farming Society' in Kottayam District may be taken as a typical example. This society with a membership of 29 has a substantial share capital of Rs. 29,300. On 90 acres of land which the society received from the Government a variety of crops like paddy, tapioca, plantains, sugarcane, pepper, rubber, coffee, etc., are jointly cultivated. Farming operations are done entirely through hired labour. No implements are owned by the society. In spite of its substantial share capital and hearty co-operation among members the society has not been making any headway. The society is confronted with several difficulties. Financially, the society does not receive aid from any external agency. Lack of transport facilities, soil erosion and havoc caused by wild animals also constitute serious problems of the society. It is reported that the society has adequate staff. The continuous losses sustained by the society are largely explained by the fact that the rate of output is not commensurate with the investment made. There is, however, no doubt about the fact that in spite of all the reverses the society had to put up with, it represents a more promising form of co-operative farming than the former one since in the former case there is no co-operation in farming operations.

## CO-OPERATIVE FARMING IN OLD VILLAGES

There is a limit beyond which new settlement activities cannot be pursued. This is especially so in the districts under consideration since the land available for new settlement activities is very limited. So we have to turn our attention to co-operative farming in old villages.

Co-operative farming societies in old villages exhibit greater variety than those in new settlements. We may distinguish at least 3 types of societies under this category. First, there are those societies which pool the lands of their members for joint farming. They conform to the generally accepted pattern of co-operative joint farming. There are about 6 such societies working at present, cultivating a total area of 125 acres and the membership per society varying from 59 to 227. Second, some societies take on lease lands belonging to their members on a cash rent basis or "*varam*" (crop sharing). In extreme cases it may happen that a society cultivates the holding (or a portion of the holding) of a single member only. Third, there are other societies which cultivate the lands of their members on a commission basis. We find that in the last two cases there is considerable straying off from the spirit and purpose of co-operative farming.

We may examine the working of a typical society in each group. As an example of the first group, we may refer to the 'Vilappil Co-operative Farming Society' in Trivandrum District. The society which has a membership of 63, has pooled together 18 acres of land belonging to its members for joint farming. Paddy is the chief crop cultivated. The output is divided among the members according to the proportion of land owned by each. Costs of cultivation are realized in the same manner. The society has reported about 70 per cent increase in output as a result of joint farming. Those members of the society who work on the farm as labourers receive wages at rates fixed by the committee. The society gets regular grant from the State Government. The society was originally sponsored by the Community Project Centre working there and used to receive considerable assistance from it. But at present there is no community project centre for this area and the society has suffered a set back on that account. The society does not own any costly implements; such implements are hired. In this respect the society has not been able to reap the benefits of co-operative farming. Manure is purchased from the open market on a ready cash basis. We, thus, find that though the society conforms strictly to the pattern of co-operative joint farming, it is not enjoying many of the economics of co-operative farming largely on account of lack of adequate financial resources.

Let us turn to the second type of co-operative farming societies in old villages. We may take the 'Punalur Pineapple Growers' Society' in Quilon District as a typical society belonging to this group. Incidentally, though this society is known as the pineapple growers' society it has absolutely nothing to do with pineapple growing. This society, which has a membership of 84, cultivates about 4 acres of paddy field only. The paddy field belongs to one of the members of the society and it is cultivated on a crop-sharing basis, the share of the society being only 50 per cent. All farming operations are carried on entirely through hired labour. Naturally, the net profit of the society is negligible. It is explicit that the society does not fulfil any of the objectives of co-operative farming.

Societies which cultivate the lands of their members on a commission basis constitute the third group of societies in old villages. 'The Kadakkal Joint Farming Co-operative Society' in Trivandrum District is a typical example of this group of societies. According to the system followed by the society, it cultivates the holdings of its members directly. The members whose lands are under the direct cultivation of the society are, from time to time, posted with full information about

the expenses of cultivation. The share of the expenses due from each member is realized in kind or cash at the time of the harvest. Of the remaining output, the society realizes a commission of 2 per cent. In this manner, the society is able to earn some profit. It is pointed out that the owner-members also consider this system as a blessing. Part of the labour requirements is met by the members themselves for which they are paid at the usual rates. The society, prior to undertaking to bring under its direct cultivation any land of its members, signs an agreement with the members concerned. At present the society cultivates 18 acres of wet land and 20 acres of garden land. It has a working capital of Rs. 5,900 and the services of a paid secretary. It is claimed that the output from the land cultivated by the society has increased by 50 per cent. The society owns only a few simple agricultural implements; the more expensive ones are being supplied by the members. The sponsors of this type of co-operative farming seem to think that theirs is a novel experiment. According to them, prior to the establishment of this type of co-operative farming society, farmers used to be indifferent about taking active steps to fight the menace of insect pests and plant diseases. The indifference of the majority caused considerable hardship for the small minority of farmers who were anxious to keep their crops free from the attack of insect pests and plant diseases. But ever since the society started functioning such problems are said to have receded to the background. Whatever be the beneficial results of the society, one cannot compromise on the basic objectives of co-operative farming. To hand over the responsibility of farming one's land to another person or body does not mean co-operative farming. Nor is it the function of a co-operative farming society to perform the tasks of a commission agent.

From the foregoing it is clear that of the several co-operative farming societies in old villages, the operations of only a fraction of the total societies approximate to those of a real co-operative farming society.

#### INDIVIDUAL FARMING ON CO-OPERATIVE LINES

According to Otto Schiller, most of the advantages expected as a result of co-operative farming do not necessarily require the pooling of land for its use. "The problem" according to him, "is to find a way of organizing small cultivators for co-operative action in farming operations without depriving them of economic independence and without affecting their individual initiative and private ownership of land." For this purpose, he has advocated a new type of co-operative farming, namely, "individual farming on co-operative lines."

In the area under discussion, societies for individual farming on co-operative lines are numerically the most important. There are about 20 such societies. And we may distinguish two broad categories of societies, namely, (i) societies which undertake primarily pumping and bunding activities on co-operative lines and (ii) societies which, instead of undertaking these activities jointly, purchase costly agricultural machinery like tractors and pump sets and hire them to their members. The former type seems to be more popular. We may choose a typical society from each class and study its working.

"The Anthikad Kole Cultivation Co-operative Society" in Trichur District is a typical example of societies which undertake pumping and bunding on co-

operative lines. *Kole* lands of Trichur District are wet lands similar to the 'Punja' lands of 'Kuttanad' in Alleppey District which remain under water for several months of the year. The tremendous work done by the Anthikad Kole Cultivation Co-operative Society is typical of the performance of most of the societies for individual farming on co-operative lines. It serves to show the lines along which co-operative farming could be profitably developed in the area under review. The society has under its purview as large an area as 1,600 acres of *kole* lands where paddy is the staple crop cultivated. Membership is extended to cultivators of *kole* lands spread over an area consisting of 5 villages. The society undertakes the bunding and pumping work of the *kole* lands under its control. The history behind the formation of this society is very revealing. Formerly, the cultivation of the entire *kole* lands of Trichur Taluk was under the control of a group of contractors. The contractor was often so powerful that in certain parts of the taluk, especially in Anthikad, he used to be known as 'Padavunadhan' (lord of the entire block of paddy field). The contractor got the bunds ready, pumped water out of the fields and did the sowing. For these operations, he used to charge the cultivators heavily. Often the contractor's role did not stop with the provision of these services; he got the paddy fields on lease from the 'jenmi' (landlord) and sublet them to cultivators in convenient plots. Thus through the process of such subletting also, he exploited the cultivators. It was primarily to free themselves from the oppression of the contractor that the Anthikad Kole Cultivation Co-operative Society was formed. Paddy fields which formed 5 blocks previously have been joined together into one block consisting of about 1,600 acres. The contractor has been completely eliminated. The following table<sup>2</sup> adequately illustrates the magnitude of the achievement in monetary terms.

Serial Number of Block ( <i>Padavu</i> )	Area (acres)	The per acre rate charged by the contractor previously for his services	The per acre rate charged by the co-opera- tive society for the same service	Saving per acre	Total savings for the block
		Rs. as. ps.	Rs. as. ps.	Rs. as. ps.	Rs. as. ps.
1.	450	37 8 0	17 3 0	20 5 0	9,140 10 0
2.	190	25 0 0	Do.	17 13 0	3,384 6 0
3.	140	47 8 0	Do.	30 5 0	4,243 12 0
4.	400	42 0 0	Do.	24 13 0	9,925 0 0
5.	400	43 10 0	Do.	26 7 0	10,575 0 0
Total	1,580				37,268 12 0

To have secured a net saving to the tune of Rs. 37,268 on account of pumping and bunding alone is indeed a creditable record. The society has a total working capital of Rs. 18,993. It has recently purchased two Brown Bovary motors with the necessary accessories at a cost of Rs. 19,000, which is no small achievement for an infant co-operative farming society. This society is thus growing into a mode

<sup>2</sup> Memorandum submitted by the Anthikad Kole Cultivators Co-operative Society Ltd. No. 818 to the Chief Minister, p. 2.

society for individual farming on co-operative lines. There are also several other societies in this category performing similar functions, though not all of them are so well established.

Under the broad category of societies for individual farming on co-operative lines, there is a second type of society to which we may refer finally, namely, societies which hire costly agricultural implements and machinery to their members. Compared to the other type, this is numerically less important. Let us examine the working of the 'Kuttanad Karshaka Co-operative Society' in Alleppey District, a typical society of this group. This society has a substantial share capital of Rs. 1,80,100 and an equally impressive membership of 1,876. The society owns two tractors and five motors which are hired to its members. Besides hiring agricultural machinery to members, the society also distributes manure. In 1956, about 2,500 tons of manure were distributed by the society. This is, perhaps, the only co-operative farming society in the area which owns a tractor. There are more than 5 societies in this category.

#### PROBLEMS FACING CO-OPERATIVE FARMING SOCIETIES

Co-operative farming has taken varied forms in the area under study. Though this paper is not meant primarily as a discussion of the relative merits of different types of co-operative farming, one cannot help making the observation that several farming societies functioning in this area are co-operative farming societies only in a very remote sense. For the future development of co-operative farming, we may have to choose probably the last type of societies already referred to, namely, societies for individual farming on co-operative lines. More will be said about this aspect in the concluding paragraphs of the paper. Here, we may briefly refer to some of the more pressing problems facing co-operative farming societies of this region.

As with most co-operative institutions the problem of finance is the most pressing one for the farming societies in this area also. The better-run societies are being included in the Five-Year Plans and given financial assistance. But most societies which receive such assistance find it inadequate. Moreover, the grants sanctioned by the Co-operative Department are usually earmarked for certain purposes and so cannot be utilised for any other purpose. Such restrictions are, of course, desirable in the case of newly established societies, but the Government should be willing to relax their rules as the societies grow in stability and they become convinced of the genuine needs of the society. Further, according to the present rules, the loans given by national extension blocks and community project centres should be repaid within six months. Some societies have complained that such insistence causes them much hardship. It would be helpful if societies are allowed to repay the loans in instalments. Owing to the lack of adequate financial resources it has not been possible for several societies to purchase the costly agricultural implements and machinery which would have considerably enhanced their usefulness. The secretary of a society has made pointed reference to the fact that if only the society had a pumpset it could have avoided a loss of about Rs. 2,000 in the last season. As a result of poor finances, thus, societies are deprived of an important benefit of co-operative farming, namely, the advantage to be derived from owning expensive implements and machinery which are beyond

the means of any single average cultivator. Lack of adequate financial resources have also made it impossible (probably, there may be also other factors) for societies to run their own manure depots from where cultivators could make their purchases of manure on favourable terms. The practice with most societies at present is to purchase manure from wherever it is available and often the price paid is high.

Apart from the problem of finance, several societies experience considerable difficulty in making cultivators agree to surrender their lands for joint farming. Cultivators are generally suspicious of co-operative farming since there is a lurking fear that it is only a subtle method of depriving them of their proprietary rights. This is particularly true of co-operative farming societies in the old villages of this region where the average holding is extremely small and the farmers are more individualistic than elsewhere. Incidentally this leads one to think of societies for individual farming on co-operative lines as the best alternative.

There are difficulties also in securing contiguous lands. Although fragmented holdings do not make co-operative farming impossible, several of its advantages are lost.

To the above problems we may add also the following : (1) the problem of lack of transport facilities and the havoc caused by wild animals in new settlements ; (2) the difficulty experienced by societies for individual farming on co-operative lines in realizing from the members their share of the expenses of farming operations like pumping, bunding, etc ; (3) rivalry among members of the same society due to differences in political ideology and (4) mounting wages of labour.

These are, indeed, real problems. But the biggest problem is that of choosing the pattern of co-operative farming. Should we have co-operative joint farming or individual farming on co-operative lines ? We have already noted that co-operative farming has taken varied forms in the five districts we have studied. There are altogether 7 types of co-operative farming societies—two types under co-operative farming in new settlements, three under co-operative farming in old villages and two under societies for individual farming on co-operative lines. Of these varied forms of co-operative farming, societies for individual farming on co-operative lines appear to be by far the most important numerically as well as from the point of view of the work done. Otto Schiller has maintained that “individual farming because of the effects of individual incentives and personal attachment to the soil under certain conditions will not give inferior but probably better results than joint farming.”<sup>3</sup> Viewed in the light of the experience of co-operative farming societies in this area, the opinion expressed by Otto Schiller has great significance. As pointed out earlier, the area under discussion is a land of small holdings, and the scope of forming new settlements is limited. One would, therefore, naturally expect the cultivators of this region to be particularly enthusiastic about co-operative farming. But, strangely enough, the progress of co-operative farming has been very tardy here. The explanation for this is to be sought in the individualistic temperament of the cultivators and certain age-long social habits. The people are accustomed to live in isolated homesteads with adjoining gardens known as

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<sup>3</sup> *Op. cit.*, *The Indian Journal of Agricultural Economics*, October-December, 1956, p. 8.

'*purayidoms*' which are a priceless possession to them. These homestead farms are highly improved plots of land. A suitable combination of tree crops is the main reason for this. Most of these crops are inter-planted ; coconut trees are usually inter-planted with arecanut and other palms, and also with jack, mango and other fruit trees. Some of these trees are used as prop for pepper vines ; pepper vines are also planted separately. Side by side, root crops like tapioca, ginger, turmeric and yams also find a place in the garden. Evidently, such inter-planting does not apply to wet lands where paddy is the major crop cultivated.

That personal attachment to the soil has been chiefly responsible for the slow progress of co-operative farming in general is further strengthened by the fact that societies for individual farming on co-operative lines has received the widest support from the cultivators. Without going into more details, we may say that societies for individual farming on co-operative lines provide the best alternative for this area. The secretary of a joint farming society has actually expressed the view that societies for individual farming on co-operative lines have greater chances of success than joint farming in this area.

#### CONCLUSION

Co-operative farming has assumed a surprisingly large variety of forms in the area we have studied. The study has clearly shown that much significance should not be attached to mere names and that in judging whether a society is a co-operative farming society in the real sense we should know its working. From the foregoing study we find that a considerable proportion of the societies did not fulfil the objectives of co-operative farming. In attempting a factual study of co-operative farming in the district chosen, we have also discussed some of the problems confronting farming societies. The main problem is that of finance. The brief discussion on the merits of individual farming on co-operative lines was only incidental to the main study. It is, nevertheless, a subject which deserves the serious attention of economists and policy makers, especially in view of the considerable importance attached to co-operative farming in the Second Five-Year Plan. The suggestions of Otto Schiller must be sufficient to provoke further thinking on alternative forms of co-operative farming.

## EXPERIENCE OF CO-OPERATIVE FARMING IN A GRAMDAN VILLAGE IN ORISSA

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The pros and cons of co-operative farming in India are now too well known. But, practical experience in co-operative farming in the country is meagre. About a thousand co-operative farming societies are functioning in different parts of the country. Considerable difficulty is felt in inducing farmers to pool land together for better cultivation under one management. The Gramdan movement which has developed from the Bhoodan movement started by Acharya Vinoba Bhave offers a method of solving the land problems of the country through voluntary co-operative methods. The movement creates a psychological climate all over the country for the solution of land problems and furtherance of co-operative life. It appeals to all sections of the people as it combines an ethical approach with practical economic advantages. Out of about 3,000 villages donated so far in India under the movement about 2,000 belong to Orissa. In many Gramdan villages of Orissa, joint cultivation of land by villagers is being experimented. The following is the study of joint farming done in a limited scale in a Gramdan village (Srirampur) in the district of Balasore in Orissa.

The village is in the Bhadrak sub-division of the district. It is at a distance of 10 miles from the sea coast and is subject to floods every year. The village consists of 70 families in all, out of which 54 belong to the fisherman caste (*Harijans*) and 16 to Kandayat caste (caste Hindus). The total land area of the village is 550 acres which includes 10 acres of homestead land, 64 acres of pastures and 476 acres of cultivated land. Nearly half of the cultivated land is double cropped with two crops of rice and half is single cropped with winter rice. Before Gramdan in the village, four families, (three *Harijans* and one caste Hindu) were landless and the size of agricultural holdings varied between 1 and 22 acres. In 1955 Gramdan took place in the village, under the leadership of two persons, one belonging to the *Harijan* group and the other to the caste-Hindu group. These two persons had the largest holdings in the village. It is reported that before Gramdan, there was a great deal of unity among the villagers, as they, as a body, resisted the previous landlord who was oppressive.

After Gramdan the villagers have set aside 25 acres of rice land out of the total 476 acres for joint cultivation and distributed the rest among the seventy families, for individual cultivation mainly on the basis of number of members in the families. Thus at present common cultivation is confined to about 5% of the cultivated land and the villagers propose to increase the area of common cultivation gradually.

The main purpose of cultivating the 25 acres in common was to create a grains reserve fund to grant credit to the villagers during the agricultural season and meet the common expenditure of the villagers both of productive and unproductive nature. It was reported that about 80% of the families in the village feel the

necessity for grain loans during the months of August, September and October every year and for the loans they depended on the money-lenders of neighbouring villages. But after Gramdan, as the individual families have lost property rights on land, they are unable to get any credit from the money-lenders. Consequently they now fully depend upon the village grain reserve for the loans and the village committee has taken the responsibility of raising loans for individual families from outside if the grains in the reserve fund are not sufficient for the purpose. In fact due to poor harvests during the last two years, due to floods, the grain reserve in the village from the common cultivation has been very small and the village committee took grain loans from a Government grain *gola* 3 miles away and also from money-lenders of neighbouring villages and supplied the needs of individual families. All such loans have now been cleared up by individuals through the village committee and as there is the prospect of good harvest this year, the villagers think that in subsequent years all grain needs of the village will be met from the village fund.

The second purpose of the reserve fund has been to meet the common expenditure of the village. Before Gramdan the villagers commonly cultivated about 3 acres of land to meet the expenses on village festivals and religious functions. At present such expenditures are met from the common fund. Besides, expenses on repair of village roads, renovation of village tanks and improvements of land under common cultivation, the construction of community house and all other common expenses including entertainment of common guests to the village are proposed to be met from the common fund.

The quality of the land set aside for common cultivation is in no way inferior to the land under individual cultivation. About half of the common land is being used to produce two crops of rice and half only one crop. The 25 acres for common cultivation could not be placed in one block due to difficulties in accommodating the distribution of land to individual families. But after considerable efforts the villagers have put it in four consolidated blocks of 4, 5, 6 and 10 acres. The blocks have been named after the national leaders like Gandhi, Vinoba, Nehru and Bimala Thakar. They all are very near the village and are situated at a distance of  $\frac{1}{4}$  mile from each other.

During the last two years, there has been poor harvests due to floods and the villagers could not show clearly the superiority of common cultivation by increasing yields. But the villagers report that under the existing technique of cultivation and under similar conditions, the commonly cultivated land yields 25 % more than the land individually cultivated, because in the land under common cultivation due to adequacy of labour, agricultural operations like ploughing, transplanting, weeding, harvesting, etc., are simultaneously done in all the common land. The operations are also properly timed in relation to rain and flood and the best advantage is taken of the season. This has been possible as priority is being given to the land under common cultivation in the supply of village labour.

As to the cost of cultivation per acre, it is reported that there has been definite reduction in the cost. It is estimated that sown paddy usually requires 30 man-days and 16 bullock-days and transplanted paddy 34 man-days and 16 bullock-days in the village while in the commonly farmed land for sown paddy 22

man-days and 12 bullock-days and for transplanted paddy 25 man-days and 12 bullock-days are being required. On the average there has been a reduction of about 25% in the labour cost. This reduction has been mainly due to the ceremonial manner and the tremendous zeal with which agricultural operations in the commonly cultivated land are done at present. It is yet to be seen whether the same zeal will continue when the whole of the village land is put under common cultivation. At present on the day selected by the village committee for work on community land, all adult workers of the village work till the particular agricultural operation in a block is completed. The women folk prepare special dishes and cakes and men eat cakes and sing as they work. On the community day work continues even at night with petromax lights on. This is one of the main reasons for the lower labour cost in the joint cultivation in the village.

In the land commonly cultivated much of permanent improvement has not been done. As all agricultural lands in the village is subject to high floods during the rains, permanent works such as irrigation canals, wells and fencing have not been taken up. Only bushes have been cleared and boundary embankments of the blocks have been constructed. The boundary embankments between different plots within a block have not been removed as the whole block has not been put to one level and embankments around each plot is required for preservation of water for the rice crop. During the last three years in all only about 100 man-days' labour has been invested in the common land for permanent improvement.

In the system of cropping and the techniques of cultivation, there has been very little change. In the best lands of the village, farmers usually grow two crops of rice in the year. Other crops like jute, sugar-cane, tobacco, pulses have not been tried. In the jointly cultivated land, the village committee follows the old crop pattern. No new crops have so far been tried but the committee members contemplate to introduce cultivation of pulses like mung, this winter, in some of the common land as an experimental measure. It may be noted that no advice on improved techniques of cultivation is available to them. The village level worker who is being paid by the *Sarva Seva Sangh* has no agricultural training. It appears, the villagers have very little faith on the technical advice given by the agricultural and veterinary experts at the nearest centres. Many villagers cited the instances of failure of artificial insemination to improve the breed of the cattle and the failure of an agricultural overseer to show higher yield after use of large quantities of artificial fertilizers in an experimental plot in a neighbouring village. Unfortunately, in this particular case due to disproportionate use of artificial fertilizers, there was an over-growth of rice plants and lower yield. In the commonly cultivated blocks the old type of seeds and implements are used. New seeds are not adopted as the farmers think that old seeds resist flood better. No fertilizer of any kind is being used as the land is subject to floods and the risk of washing away of manure is present. The only improvement in implements during these three years has been the purchase of better bullocks for the common cultivation out of Rs. 1,280 provided by the *Sarva Seva Sangh* for the purpose. It is the common feeling in the village that agricultural improvement is only possible in land both under common and individual cultivation when floods are controlled by proper drainage system.

With regard to the organisation of labour and capital for the joint cultivation in the village, it was noticed that all adult persons in the village have elected a

village committee of eleven members. Each member of the committee has been entrusted with the management of particular department such as agriculture, sanitation, co-operative store, education of adult and children, etc. For agricultural operations in the commonly cultivated land the village committee fixes a date for a particular operation and announces it to the villagers two or three days ahead. On that particular day all adult male workers of the village join the work. No accounts for the annual contribution of labour by individual families is maintained. If somebody is sick or has a mishap in the family he is exempted for the day and has not to provide additional labour for the purpose on other occasions. On the day of work in the common field, all adults suspend work in their own fields or households. If any adult member from any of the families in the village is outside and earns money the family has to contribute an amount equivalent to his wage. Up till now, very few have been shirkers in the work and among the workers, feelings regarding differences in the efficiencies have not developed. As all the produce from common cultivation is put in the reserve fund, complications regarding remuneration of the managerial and field workers or more efficient and less efficient workers have not arisen. Loan from the common reserve fund is granted on the basis of need estimated on the basis of family members. In the village as a whole there is not much of unemployment or under-employment. In the slack season men and women do some spinning. The *Sarva Seva Sangh* has provided the village with 110 charkhas for the purpose. About 7 or 8 farmers with small amounts of land work as labourers in the farms when they have no work. No hired labour is utilised in the land commonly cultivated.

Most of the capital for community cultivation has been provided by the *Sarva Seva Sangh* as loan or aid. Some agricultural implements have been donated by the Tatas to the village and 6 bullocks have been purchased for common cultivation out of an aid of Rs. 1,280 from the *Sarva Seva Sangh*. The bullocks are being maintained in the sheds of private individuals as sheds for them have not been constructed out of the community funds. Besides, the *Sarva Seva Sangh* has advanced an interest free loan of Rs. 1,000 for five years for a grain *gola* which forms the nucleus of the village grain reserve fund. The village committee has not been able to have any other capital assets for community cultivation. The seed for the community cultivation was contributed by all farmers in the first year, in proportion to the land in possession of each farmer. In subsequent years the seed is being reserved from the produce in the community land. The seed is being stored with private individuals at present, as no community store has been constructed and no payment is being made for storage. All other expenses are being met by contribution of the individual farmers. On the ploughing day in the community land, besides the community bullocks, all bullocks of individual farmers in the village with ploughs come to work. No expenditure is incurred for manuring as no manures are used. No separate depreciation fund for capital assets or for payment of interest on loans has been created. All such charges are expected to be met from the common reserve fund.

Besides the agricultural capital, the villagers have created some non-agricultural capital in the village, by contribution of voluntary labour and money. Rooms for a post office and for community meetings have been constructed adjoining the village school, by contribution of money and labour by the villagers. Money from the common reserve fund has not been spent for the purpose due to shortage

of funds. Besides, at present the main purpose of the grain reserve fund is to make the village self-sufficient in foodgrains and to give relief to the farmers by making interest free grain loan available to them. During the last three years a tank for drinking water has been renovated and another tank for bathing has been dug out of the funds provided by the District Board and a non-official flood relief fund. The villagers have contributed voluntary labour of about Rs. 500 for the purpose.

As only about 5% of the village land is under common cultivation and the entire produce from such cultivation is put to a common reserve fund many of the difficulties regarding distribution of the produce and allotment of jobs to different individuals for joint cultivation have not arisen. The problem of proper utilization of the total village labour by the village committee does not arise as each family is engaged in the cultivation of the land given to it and in other subsidiary work such as fishing, as it did previously. The only change after Gramdan is that the adult members of each family have to work for some days in the community land and for other common purposes. The arrangement for use of the reserve fund has not been difficult as the fund is used mainly for granting loans to farm families in the village and meeting other common expenses. The need for marketing the product from cultivation has not been felt. The marketable grain surplus of individual families is also small. The village committee runs a co-operative store. It has not been registered with the State Co-operative Department due to its various requirements for maintenance of complicated formal accounts. But the store runs very successfully. It started with a working capital of Rs. 700, out of which Rs. 500 were given as loan by the *Sarva Seva Sangh*. The present capital is about Rs. 2,000. The villagers purchase all their day-to-day requirements through the co-operative store. It purchases their grains for cash also if offered or exchanges grocery and stationery articles for grains.

The organisation work is entirely done by the village people through their committee. None of the village committee men has read beyond the middle school stage. Only one person in the village passed the matriculation examination and he has been sent for a short course of technical training in the Gramdan centre in the district of Koraput. He is expected to serve the village after his return. Another boy of the village has been sent for training in weaving for six months, so that after his return the yarn produced in the village will be woven into cloth. Part of his training expenses is being met by the village committee and part by the *Ashram* where he is being trained. The welfare worker appointed by the *Sarva Seva Sangh* for a number of villages in the area helps the organisation by his advice. He is a graduate of the Utkal University and has no technical training in agriculture or sanitation. The village committee has very little access to improved technical knowledge in agriculture.

With regard to the amount of outside capital during the last three years, the village has received a fairly large amount from the *Sarva Seva Sangh*. The Sangh has advanced an interest free loan of Rs. 1,500, Rs. 1,000 for the grain gola and Rs. 500 for the co-operative store and an aid of Rs. 1,280 for purchase of bullocks. Besides, 110 charkhas and some agricultural implements have been given as aid. The village has received Rs. 2,400 from the District Board and non-official relief funds for renovation of an old tank and digging of a new one. The economic

and social effects of Gramdan on the farmers of this village and of neighbouring villages are reported to be far-reaching. The landless families have got some land. The distribution of holdings before and after Gramdan has been as follows :

Acres	Number of holdings before Gramdan	Number of holdings after Gramdan
0 to 2	4	3 (1.5 to 2 acres)
3 to 5	25	29
6 to 10	26	26
11 to 15	10	7
16 to 19	5	5 (16 to 19 acres)
Total	70	70

Land to different families has not been allotted in consolidated blocks due to difference in quality but all persons have not received the land which they previously owned. There has been several exchanges. The social relationship has distinctly improved and the whole village works now as an organised team. After Gramdan in this village, two neighbouring villages have followed the example and in other surrounding villages the farmers are now seriously debating the issue of donating their villages and it is reported that in all of them more than 60 % of the farmers have signed the deeds of gift. But in the village itself the villagers find it difficult to extend the area of common cultivation. Extension of common cultivated area will naturally lead to the reduction of the holdings allotted to individual families. It appeared that the farmers have not been psychologically prepared for a drastic change in the units and manner of cultivation. The village committee does not feel competent enough to assume the responsibility of the cultivation of the entire 476 acres of land, by utilizing the labour and capital of the village. The task of feeding 350 persons of the village from the common cultivation with great risks to crops from floods appears to them very great. They feel that the people are not psychologically prepared for putting all land under joint cultivation and they are afraid that they may not show then the same zeal as they show now in the common cultivation of only 5 % of the land.

Moreover, at present there is no organisational set up for cultivating the whole of the village land as one unit. There will be difficulties in raising credit and pooling the existing capital. For distribution of the common produce a satisfactory definite norm has not been evolved. At present for common cultiva-

tion of 25 acres, there is no practical difficulty. Each family has its own farm, cattle, implements, storage for grain and fodder and cattle shed. For common pooling of all these, the entire structure of the village has to be changed and a great deal of additional capital will be required. That is why the village committee is rightly cautious in extending the unit of common cultivation.

Their future plan is first to arrange through government agencies for the protection of the agricultural land of all neighbouring six villages from floods and for construction of irrigation channels in it at a cost of Rs. 3,500 to 4,000 and start multi-purpose co-operative societies for these six villages where they expect Gramdan will soon take place. After such measures they will extend gradually the units of joint cultivation in each village as the reserve funds increase and people are more experienced in the methods of joint cultivation. It is felt that once floods are eliminated and irrigation provided, there will be better crop planning in the villages and besides rice, cotton, jute, vegetables and pulses will be grown.

The experience in the village shows that joint cultivation has led to decrease in the cost of cultivation and increase in yields per acre. It has led to some permanent improvements in land and creation of greater amount of agricultural and non-agricultural capital through the use of unemployed village labour. It appears that, it will generally lead to improved method of cultivation, better marketing of products and general social and economic improvements in the village. But the initial difficulties of pooling land and capital into a single unit are very great. For this, social cohesion and unity among the villagers are essential. The nature and extent of the influence of the village leaders on others are also great factors. In this particular village, all families belonged only to two castes and there was no friction among them. In fact they were organised in a unified manner to fight an oppressive landlord. The disparity between different families in wealth and education was not very great. In such a background an ethical zeal has been created by the Gramdan movement to surrender private rights on land for the benefit of poor neighbours and the social and economic benefit of the whole village. That is why the whole village works now with one mind and probably after some years it will not be difficult to put all the village land under one unit of cultivation. But in other villages with farmers belonging to various castes and having greater disparities of wealth and education, pooling of land for common cultivation will not be easy.

Secondly, from experience in the village it appears that for introduction of co-operative farming in any village, a large sum of initial capital is necessary and the structure of existing agricultural capital will have to be changed. In some cases, it may lead even to wastage of existing village agricultural capital, like cattle sheds, grain stores, ploughs and other old types of implements. An individual Gramdan village might get the necessary additional capital from a philanthropic organisation like the *Sarva Seva Sangh*, or from the Government. But the problem will be great when villages in thousands start co-operative farming. It needs mobilization of credit resources in the rural areas and organisation of credit co-operatives and peoples' banks as in China.

Thirdly, the study suggests that the difficulties of administration of co-operative farms through the personnel available in the village are great. The tasks of

village committees to meet the risks of crop failure, to arrange credit for the villagers, to preserve the agricultural capital assets of the village, to satisfy villagers regarding the suitability of crop patterns and methods of cultivation followed, to distribute satisfactorily the produce, to allot jobs to different workers and to maintain the incentive of the workers to work hard and produce more are very hard. It requires competent leadership in the village.

Then again, there are certain problems which vitally affect the success of co-operative farming in a particular village but it cannot be solved by a single village. Problems like flood control and provision of irrigation canals are to be dealt with at State level or regional level. Sometimes in such matters interests of different villages clash.

Lastly, the study shows the advantages of a small beginning and the gradual extension of co-operative farming. The farmers have to be psychologically prepared. They should be experienced in joint farming of some village land and see the results of such farming. Good results would encourage them to cultivate all the village land jointly and bad results would probably discourage them. The experience of one village produces great effects on surrounding villages. As co-operative farming is to be introduced in this country by voluntary methods and not by coercion, the pilot schemes should be organised with great caution and efficiency.

## PROSPECTS OF CO-OPERATIVE FARMING IN INDIA WITH SPECIAL REFERENCE TO NORTH MYSORE

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As in other parts of the country, in the erstwhile Bombay State (including the four districts of Belgaum, Bijapur, Dharwar and North Kanara, which now form the northern part of Mysore) the co-operative movement and also co-operative farming have made headway. On 30th June 1956 there were 74 co-operative farming societies in these four districts. The detailed classification of these societies is as under:

TABLE I—CLASSIFICATION OF SOCIETIES

Name of the District	Better farming societies	Tenant farming societies	Joint farming societies	Collective farming societies	Total
Belgaum .. ..	9	12	4	3	28
Bijapur .. ..	6	—	1	—	7
Dharwar .. ..	10	14	—	1	25
North Kanara ..	9	2	3	—	14
				Grant Total ..	74

As the functions of better farming societies are similar to those of multi-purpose societies, organisation of better farming societies has been discontinued. Of the remaining three types, the tenant farming societies outnumber the joint and the collective farming societies, as tenant farming suits the individualistic temperament of the farmers.

The following table gives the details of the working of all these societies as on 30th June 1956 (excluding figures for better farming societies).

TABLE II

1. Number of members	..	..	..	1,849
2. Classification of members				
(a) Scheduled castes	..	..	..	597
(b) Ex-criminal tribes	..	..	..	513
(c) Non-backward class	..	..	..	739
3. Share capital	..	..	.. Rs.	92,357
4. Reserve and other funds	..	..	.. „	22,789
5. Loans from Government	..	..	.. „	434,812
6. Loans from Bank and other sources			.. „	105,110
7. Working capital	..	..	.. „	655,068
8. Government subsidy	..	..	.. „	137,406
9. Total area in possession of the societies	..			22,606 Acres and 8 Gunthas
10. Government Waste land	..	..	..	9,293 Acres and 24 Gunthas
11. Private land	..	..	..	3,312 Acres and 24 Gunthas
12. Area cultivated	..	..	..	6,982 Acres and 13 Gunthas

It is clear from the above table that a majority of the members belong to the scheduled castes and ex-criminal tribes and that the societies are mainly organised to rehabilitate them. The members from non-backward classes number only 739. It is also clear that most of the land in possession of the societies is Government waste land and that the Government is helping the societies substantially by way of loans and subsidies.

TABLE III—MEMBERSHIP, AREA AND YIELD OF CROPS IN BELGAUM AND DHARWAR DISTRICTS.

Particulars	Belgaum District				Dharwar District			
	Tenant farming societies	Collective farming societies	Joint farming societies	Total	Tenant farming societies	Collective farming societies	Joint farming societies	Total
No. of societies .. ..	12	3	2	17	14	1	—	15
No. of members .. ..	486	165	87	738	621	57	—	678
Area in possession of the societies (in acre and gunthas)	3019.30	836.1	211.00	4066.31	5189.13	429.4	—	5613.17
Area under cultivation (in acre and gunthas) ..	2170.04	549.30	129.36	2849.30	2796.28	164.0	—	2960.28
<i>Average yield of main crops in lbs. per acre</i>								
(a) Paddy .. ..	560	640	—	600	710	640	—	675
(b) Jowar .. ..	283	—	200	241.5	218	—	—	218
(c) Groundnut .. ..	352	—	160	262	373	—	—	373
<i>Normal yield per acre in lbs. obtained in the area</i>								
(a) Paddy .....	1,000 lbs							
(b) Jowar .....	1,000 lbs							
(c) Groundnut .....	1,000 lbs. to 1600 lbs. depending on the variety							

From Table III it is clear that the area cultivated per member works out to 3.8 acres in Belgaum district and 4.3 acres in Dharwar district. The yields of paddy, jowar and groundnut obtained on the co-operative farms are far below the normal yields of the crops in the area. This clearly shows that the main object of increasing the yield of land and securing better returns to the cultivators by providing sufficient land is not attained.

A study of the detailed working and management of these societies was undertaken under the guidance of the Agricultural Economics Section in the College of Agriculture, Dharwar. The results of the study are as shown below:—

#### *Tenant Farming Societies*

These societies have been organised either to settle landless agricultural labourers or backward class workers. The main problem of securing the interests of the tenants at large is not touched. Efforts are made to reclaim waste land and to settle working families in depopulated villages. Most of the land taken for cultivation is Government waste land. Most of the societies organised are in the Malnad (heavy rainfall) tract. The land in all cases is divided into plots and given for individual cultivation. The area allotted in Malnad tract is considered just sufficient for maintaining the member and his family but the area allotted in the

transition tract falls far short of the minimum requirement. The yield obtained on the farm is far from satisfactory. Most of the societies have been able to fulfill only a few objects of the bye-laws. The societies are doing mainly the work of super-landlords as they work mainly to distribute the land among the members for cultivation.

### *Co-operative Collective and Joint Farming Societies*

The working of collective farming societies shows that collective farming has not met with success, and the joint farming effort is a failure. This is mainly due to individualism and utter lack of spirit for collective and joint effort. Though these societies are called collective and joint farming societies, they are in practice tenant farming societies.

This study reveals that the co-operative farming societies are not successfully worked. The main reasons attributable for this state of affairs are:—(1) lack of co-ordination among the members; (2) mis-management of the affairs by the managing committee; (3) majority of the members being non-agricultural labourers; (4) all lands that have been taken for cultivation are not brought under the plough and all members do not work on the land; (5) some members have abandoned cultivation as the income was found to be insufficient for their maintenance owing to insufficient holding given for cultivation; (6) loans are not repaid regularly and overdues are high; and (7) most of the members do not follow improved methods of cultivation which result in low output.

### *Future of Co-operative Farming*

As has been rightly mentioned in the All India Rural Credit Survey, co-operation in India has failed but it must succeed. Likewise co-operative farming in India has not achieved the desired success but it must succeed if Agriculture in our country is to prosper. The First Five-Year Plan very well recognised the need for the consolidation of holdings and of co-operative farming. It considers that co-operative farming by pooling all the land in villages should be the ultimate objective of farming. The Second Five-Year Plan has taken into consideration the slow progress made in co-operative farming during the First Five-Year Plan period. It therefore recommends that a sound foundation should be laid for the promotion of co-operative farming during the next ten years. The Conference of State Ministers for Co-operation held at Mussoori very recently has recommended that co-operative farming societies should be organised preferably in the National Extension Service and Community Development Block areas and to begin with 500 co-operative farming societies should be organised in such centres. In this connection the recommendations made by the Indian Delegation to China to study the agrarian co-operatives are worth mentioning. Summary of some of the important recommendations are as follows:—

1. In the next four years, *i.e.*, by 1960-61 about 10,000 co-operative farming societies should be organised at the rate of one society for every 50 villages,
2. Such new societies should preferably be organised in the N. E. S. and C. D. B. areas.

3. A survey of the existing co-operative farming societies should be undertaken and the best among them should be selected for demonstration.
4. The lands of farmers should be pooled for joint cultivation and where Government or new land is available for cultivation co-operative collective farming should be encouraged.
5. Only those people who are willing to work on the land should be taken as members.
6. Normally in paddy growing areas the area of the societies should be between 35 and 50 acres and in areas where cotton and wheat are grown it should be 60 to 100 acres. In every society the membership should be between 7 and 10.
7. Every society should have its own Five-Year Plan.
8. The member's right to land should be retained and the product of the land should be distributed according to the fertility of land.
9. As in China, the wages should be determined according to the efficiency of workers, i.e., on the basis of 'norms'.
10. The principle of State partnership should be applied to co-operative farming societies.
11. The price policy followed in China should also be applied to India.
12. For the promotion of co-operative farming societies in the next four years about 2 lakh youths should be trained. Such a training should also be given to village level workers.

A review of the recommendations made by the various committees and commissions show that co-operative farming is the only way for progressive farming in our country. Co-operative farming therefore has to be encouraged by every means. Each country has organised a type of co-operative farming that suits it. If in Denmark dairy co-operatives have been successful, in Italy agricultural labour co-operatives have been successful. If in Russia under a communist regime collectivisation has been possible, in Israel co-operative farming societies with various degrees of co-operation have been found successful. The co-operative farming societies organised in Japan are of a different type altogether. China has made a new experiment in co-operative farming. It has proved that co-operation is successful by doubling the yield in about 2 years' time. Thus each country has found out what is suited to its conditions. The conditions in our country are peculiar to itself. Our need is to switch over from the cultivation of uneconomic holdings to a kind of large scale farming and to provide incentives to tenant farmers and to landless agricultural labourers. We cannot therefore bodily import any of these forms of co-operative societies followed in foreign countries. The type of co-operative societies should suit the local and political conditions of the country. Co-operative societies should be encouraged in the

background of our objective of building a welfare State and a socialistic co-operative commonwealth.

The best way to promote co-operative farming in our country is to prove its utility to the farmers by actual demonstration. For the promotion of co-operative farming societies an element of compulsion is also needed; but at the same time it should be noted that the right of the farmers to the land should not be touched. The principle of State partnership in a co-operative venture has been already accepted. The idea that if people owning 50 per cent of the land agree to co-operative joint farming, the remaining people should be compelled to join the society, has already been incorporated in the Bombay Co-operative Societies Act. The Planning Commission has also made similar recommendations. The Planning Commission has recommended that there should be a ceiling on holdings. Likewise there is a need also to determine a *floor* on holdings. All sizes of land which are uneconomic to cultivate should be considered below floor, and should be pooled for joint farming. There should be a provision in the Co-operative Societies Act to pool such lands for joint cultivation on a co-operative basis. Farmers having lands of economic sizes or above may be allowed to continue to farm their lands independently, and they may be allowed to get help from the co-operative societies in obtaining requisites and in selling their produce, as is done in Japan. To promote co-operative farming it is necessary to guarantee minimum prices to members as in China. The price should be determined well ahead of the season. There should also be proper incentive for efficient work—the system of norms introduced in China is worth emulation.

In short, uneconomic holdings should be pooled for joint cultivation mainly on a voluntary basis with an element of compulsion wherever necessary. The owners of economic holding may either pool their land for joint cultivation or take the help of co-operative societies for the requisites and for the marketing of produce. The Government should also come forth to help the societies with men, money and materials as the Government have a vital role to play in a socialistic co-operative commonwealth. For the promotion of co-operative farming it is also imperative that there should be a network of trained personnel at all levels. The management of the co-operative farming societies should necessarily be in the hands of trained and experienced Graduates in Agriculture who should be loaned by the Government at the initial stage. If the above broad principles are followed in promoting co-operative farming societies, there is no doubt that the co-operative farming societies will soon grow both in quality and quantity.

# THE BURDWAN EXPERIMENT AND OUR PROSPECTS OF CO-OPERATIVE FARMING

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Of late, a handful of co-operative farms have come into existence in the Burdwan district of West Bengal purely of the members' own accord. But in organisation and background, in technique and operations and in their problems and possibilities they have no much distance among them. Being situated very near to each other they are not only influenced by the same climate, soil and topography but economic factors affecting the farm operations are bearing equally on them. For this reason some knowledge of the working of any of them may provide us with some insights into the economics of co-operative farming in the region and hence in the country as a whole. A study is, therefore, made in this article of the working of one<sup>1</sup> of this group of co-operative farms. The discussion is divided into two sections. In the first the experiment is described in some detail whereas the second embodies some considerations whether or not such co-operatives deserve encouragement from the Government and if so in what specific ways.

## 1

The village<sup>1</sup> in which the co-operative society under review is operating is situated about four miles from a rural market centre which is linked up with the district headquarters nine miles away by a metalled road and a regular bus service. The four mile long village road leading to the market centre is unmetalled and remains muddy during the rainy season and after. Most of the cultivable lands of the villages are of the alluvial clay soil, neither sandy nor sticky and offer scope for single cropping in *Aman* paddy. All the cultivable lands in and around the village, however, are being served by canal irrigation for a pretty long time and the widespread use of fertilizers is also not a very recent phenomenon in the village.

The management of the society vests with a managing committee which consists of a chairman, a secretary, a treasurer and a number of members. All the members are experienced farmers and the present Secretary who read upto High School is very intelligent and with some insight in agricultural management but is handicapped only by a lack of elementary training or knowledge in book-keeping. The members of the managing committee are all elected from among the members and are responsible to them. They do not receive any remuneration or commission for the work of management. The members in general bear no responsibility for any item of work of the co-operative. They hold shares of the co-operative to the extent of the amount of lands they handed to the co-operative and are entitled to the first 1/3rd of the produce of the farm before any payments are made for the things or services purchased in proportion to their lands as well as to the profits of the farm on the proportional basis. The part they can take in the functioning of the farm is three-fold. Firstly, as members of the co-operative they can seek election to the managing committee and to the offices of the chairman, secretary

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<sup>1</sup> The name is not disclosed in the body of the paper.

or treasurer. Secondly, as members they hold the right to approve or withhold their accord on the work of the committee, decisions being carried out on the basis of the majority. Thirdly, they can take part in cultivation as labourers at the usual market rate or as field supervisors at a fixed rate of Rs. 1.50 a day. In practice, however, out of the total of 48 men of the male labour force of the members' families only 8 men take part in cultivation as field supervisors.

It will be seen from Table I that in 1950-51, *i.e.*, in the first crop year of the society, the number of members was 23. In the next year the membership rose to 33 and this increase may be attributed partly to the fact that in the first year the society received a handsome amount of subsidy from the State Government and since then the number remained stagnant except that another member joined in 1953-54. The amount of lands held by the co-operative consequently increased from 222.96 acres in 1950-51 to 305.26 acres in 1951-52, and to 313.26 in 1953-54 and remained at that level thereafter. It is, therefore, clear that in course of the six years since 1951-52 the society has not been practically able to attract any new member to join it. On the other hand, none of the members who once joined the co-operative has left. It must be stated that at the time of joining the co-operative the members sold away the equipment and work stock to finance the co-operative and if anybody wants now to get away he will have to make a fresh purchase of these things. Thus the fact that none of the members has as yet left or that the co-operative has not yet closed down may merely indicate that for any individual member the net real losses involved in co-operative management has not yet exceeded the real cost of purchasing individual equipments and starting afresh.

TABLE I—MEMBERSHIP AND LAND RESOURCES

Crop year	No. of members	Amount of lands in acres
1950-51 ..	23	222.96
1951-52 ..	33	305.26
1952-53 ..	33	305.26
1953-54 ..	34	313.26
1954-55 ..	34	313.26
1955-56 ..	34	313.26
1956-57 ..	34	313.26

It is interesting to note that although the society has the advantage of making a fuller utilisation of lands by demolishing at least a good number of boundaries that separate one plot from the other it has guarded itself against such a decision because it is much too conscious of the experimental nature of the undertaking and of the possibility of dissolving at any time in the face of heavy odds. It should be added that the average size of plot of the lands held by the co-operative is roughly 0.50 acre.

Production figures of *Aman* paddy of the society are given in Table II. Students of agricultural economics in India complain not infrequently about the difficulties they come across to obtain correct information about production, productive resources, cost of production, etc., at the farm level. Apparently, however, it seems that since a co-operative has to keep a full-fledged accounts ~~it not for any~~ thing else at least for the sake of satisfying the different constituent members such a difficulty will present itself to a much diminished extent in this respect. Experience, however, shows that the difficulty of obtaining correct information in regard to production in particular is greater in the case of a co-operative farm. The reason is not far to seek. The co-operative society is under obligation to get its accounts annually checked by the Government and because the latter holds the powers to help or hinder the members by subsidizing the society or taxing the income of the society or the incomes of the members individually it is not unnatural that a co-operative farming society takes special care and caution in preparing its official accounts so as to create an impression to its readers that it is desperately struggling just to make its both ends meet and that it has made only nominal profits or no profits at all. The following table shows the *official* production of *Aman* paddy in each of the seven years of its life.

TABLE II—OUTTURN OF AMAN PADDY

Year	Yield of Aman paddy (in maunds)	
	Total	Per acre
1950-51	5551	25.89
1951-52	7660	26.10
1952-53	7810	25.58
1953-54	7209	29.39
1954-55	8763	27.98
1955-56	8786	28.04
1956-57	8154	26.01

This table of production has been available from the account presented to the Government. On close enquiry it is revealed that there is no difference between the actual per acre production of the co-operative and that of a large-sized self-operated farm.

The society has mechanised its ploughing and own two tractors.<sup>2</sup> On an average, the society employs 11,646 man-days. Of the men who work in cultivation four labourer-cum-buffalo-cart-drivers and two tractor drivers are employed throughout the year. Eight men from the members' families are employed at farm as field supervisors for four months in a year, all other workers are employed casually. Computed on the basis of production of 1956-57, production per man-

<sup>2</sup> The society has kept four ploughs and eight buffaloes also. To cater to the needs of the society as well as of the domestic needs of the members who now do not own any, four buffalo carts are thought to be the indispensable minimum and hence four buffalo drawn ploughs also are used in cultivation.

day (actual field or supervisory field operations) in the co-operative as well as in a large-sized peasant farm in the village are respectively seen to be 0.92 and 0.70 maunds of *aman* paddy. This discrepancy is due to the fact that the co-operative has been able to do away with the need of an amount of plough-days by means of mechanised ploughing. The farm in question has saved a total of 2,817 plough-days in 1956-57. That is to say, it has released 9 man-days for every acre of land.

The costs of production of the farm on average are itemised as follows:

	(in Rs.)
1. Labour .. .. .	18,819
2. Water-rate .. .. .	1,673
3. Rent .. .. .	1,103
4. Seeds .. .. .	2,000
5. Manure and fertilizers .. .. .	10,000
6. Oil and tractor fuel .. .. .	6,752
7. Interest .. .. .	2,000
8. Depreciation .. .. .	3,000
9. Travelling and incidental .. .. .	795
10. Licence fee .. .. .	50
11. Audit fee .. .. .	203
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	46,395

Purely from the operators' point of view the costs of production per acre of land differ in magnitude in our individual system of farming according to the form of individual management. There is thus one cost, for example, for farmers who do not engage any family labour in actual farming operations and cultivate lands solely by means of hired labour and another for those who cultivate lands by means of family as well as hired labour while the owners of lands who get their lands cultivated by lease-holders or share-croppers have to bear costs of a third magnitude. In the present farm there are only three members who previously cultivated lands by share-croppers and by joining the co-operative they have been able to reduce their costs and increase the farm income. So far as the first type of members are concerned it is not clear by how much they have been able to reduce their costs and increase their farm incomes, but the fact remains that a number of families are being able to do their farming at a comparable cost without having to undertake any field operations. It is the second group of farmers, who constitute a major proportion of the members, whom the co-operative has not been able to satisfy fully. In fact, there is some amount of positive discontent among these farmers who were themselves able under own management to do the whole of the supervisory work and some amount of the operational work too. Under self-management the actual services provided by them in farm work help to increase their farm income whereas under the co-operative management the nature of work they like to do, such as ploughing in the water, is not available following the mechanisation of ploughing, and the amount of supervisory work for which the society can now expend is also limited. The society, however, is allotting most prudently all its supervisory work to this class of members.

Whatever the present position of the co-operative it seems hardly possible to resist the conclusion that the establishment of the co-operative society and a few

other such societies<sup>3</sup> in and beyond the district clearly satisfies the belief that agriculturists will hardly come forward voluntarily to combine into a co-operative farm. Thus a distinguished German expert writes, "There are nearly no examples to be found in any country that in old villages of the traditional peasant structure the agriculturists voluntarily. . . pooled their lands for joint farming."<sup>4</sup> The growth of the present co-operative may just be indicative of the existence of economic and social circumstances in our rural sector quite different from those that prevail in the rural sector of Western nations.

Yet, will all other farmers of the area have the same incentive to give up self-operation of their farms and pool them together for large-scale co-operative farming? Before 1950, the year in which the farming society under review was registered, the price of paddy fell to a very low level and the peasants who cultivated their lands mostly with hired labour realised that self-cultivation was not paying sufficient dividend. Secondly, the region in which the co-operative is operating has a chronic difficulty of agricultural labour supply and is a permanent labour importing area. On busy months villagers have to travel upto 75 miles to recruit labour and this means not only some expenses in pecuniary terms but also a great deal of anxiety and hardship on the part of the farmers. Tractorisation, it was thought, would lessen their need to search far and wide for labourers in busy months. Thirdly, a number of families with medium holdings reached such a condition that they were unable to finance their normal agricultural operation. Finally, it is not ruled out rather it confirmed from the writer's close contacts with the members that some social workers provided substantial strength to the members to anticipate favourably the prospects of a co-operative farm.

Now after eight years of farming under co-operative management the reaction of the members as has been noted above is, however, not absolutely uniform. A group of farmers who can use in cultivation some family labour of specific type complain of an amount of loss in co-operative management. Similar farmers of the area, therefore, have their minds tilted against the co-operative remaining, of course, near the region of indifference. The basic reason why the present co-operative has not been able to break the back of other farmers' objection to join this or similar co-operatives has to be sought in the society's not being able to raise the efficiency of the farms after co-operativisation. Another reason why farmers are not looking upon the co-operative management very favourably is that on occasions of special need such as giving their daughters in marriage they are not free to sell a part of their land assets. This difficulty can be easily eliminated by providing in the by-laws for a sale of share if the present level of efficiency can be raised to a significant extent. The sole obstacle, therefore, to a widespread voluntary growth of co-operative farms is virtually the lack of actual results or of visible promise of increased farm income or of still more efficient farming on a sure basis.

## II

On the question of increasing production there is little evidence to show from the case under review that the mechanised co-operative farming on single cropped lands has as yet shown any advantage over peasant farm if the comparison

<sup>3</sup> On 31st March 1957 there were 90 farming societies in West Bengal.

<sup>4</sup> Otto Schiller in *The Indian Journal of Agricultural Economics*, October-December, 1956, p. 4.

is made on the basis of the present level of working of the two systems. On the contrary, the large-sized self-operated farms having adequate family labour and work-stock can in the short-run earn more profits. In fact the large farms, though relatively few, have more than 33 per cent of cropped area under their occupation.

The ability to work and save of this class of farmers has so long been affected by a number of factors. Firstly, in the last hundred years the whole of our agricultural industry remained so neglected that our peasants, medium or big, could hardly hold out hopes of making good business having overcome all sorts of difficulties that surrounded them. Secondly, some eugenic or demographic factors also come to play. It has been this writer's experience in West Bengal, for example, that it is the lower castes among the Caste Hindus and higher castes among the scheduled castes that make the most active, vigorous and calculating peasants. Thirdly, family composition and consequent family responsibilities of a portion of big peasants sometimes prevent them from using their saving for productive purposes. A big peasant with six daughters and six sons, for example, considers himself as being under obligation to reserve his savings for building more houses and marrying his daughters. Now against the first it can be said that the scene of the rural economy has started to change. Gradually more and more areas are coming to benefit by new irrigation facilities. With the guarantee of irrigation facilities farmers find it profitable to use fertilizers and other manures to increase the yield of the lands. Credit problems are also getting easier. The prospects, therefore, of making good business in cultivation have been in sight for our big peasants. This is undoubtedly one of the significant recent changes in India's rural economy. About the second factor it can be said that the caste peculiarity where found is largely the result of social habit and tradition. Fortunately however, the largest portion of big peasants in many districts in West Bengal, for example, belongs to those castes which make relatively more efficient farmers, although it is not possible to show the actual quantitative comparison. Finally, even though it is true to say that adverse family composition where found is an impediment on the ability to save this is amply neutralised by other favourable factors. In the first place, peasants in this group are endowed with hereditary skill in cultivation and agricultural management and a skill that has sharpened all the more through its constant exercise and application since their boyhood. Secondly, the sense of ownership of the farm and the expectation of earning the sole profits of cultivation provide them with a psychological energy which they will be unable to sustain under a co-operative management. This is particularly strong in those farm families of this group whose economically active persons are all operationally engaged in agriculture.

But when one keeps the longer range in view one is struck by the possibility of the increase in the productivity per acre through the co-operativisation of our farms. Thus the two principal factors which have overwhelming influence on production and over which men have some control, are water supply and fertilizers. Where canal irrigation serves the cultivable lands co-operative management of farms cannot bring upon any improvement on the water supply. In the case under review, therefore, the co-operative does not enjoy any advantage over a self-operated farm. It is quite possible, however, that where there is no scope for canal irrigation, the creation of very large co-operative may facilitate the operation of minor irrigation schemes such as well irrigation through pumping, etc. And

obviously in those areas also where canal irrigation serves the lands for only one season minor schemes of irrigation can be set up for a second season and provision can be made for double cropping. In respect of fertilizer use, however, it appears that self-operated farms do not suffer any disadvantage compared to the co-operatives. Because in areas where use of fertilizers has come into vogue the farmers big or small are in a position to purchase them from the retailers on credit. Large farmers in particular are not handicapped because they have no difficulty to run the risk of spending a sum on interest. But one must not lose sight of the fact that the use of fertilizers depends on whether or not the lands where the fertilizers will be put to use are assured of a steady water supply. This is why fertilizers are most efficiently and widely used in those areas where canal or any other system of irrigation prevails. To the extent, therefore, the large co-operative farms are capable of setting up small irrigation schemes where there is none they also pave the way for the use of fertilizers. It is, therefore, not correct to argue purely for the reason that the contrary has not yet been actually experienced that co-operation or no co-operation production per acre does not change.

This however is essentially a long term prospect. The net result in the period immediately following co-operativisation is at any rate bound to be threefold. Firstly, there appears to be no possibility of any increase in total output. Secondly, a section of farmers who can provide family labour of specific type only is likely to see their incomes reduced to some extent. Thirdly, mechanised ploughing will increase the level of unemployment among our agricultural labourers. If, therefore, none of the newly organised co-operative farms can rise in the very near future above the present level of working, a step in the direction of co-operativisation of our farms will merely effect a redistribution of agriculture's income in favour of the petroleum or tractor producing population in the country and abroad at the cost of a major part of our farm population and hence is bound to face resistance if left to the voluntary initiative of the farmers.

Yet, there is much that has to be seen behind the veil of the present level of working of the co-operative farm. In the case under review the co-operative has apparently released 2817 plough-days for a farm of 313.26 acres. This figure will be thoroughly deceptive if one takes this as representing the total amount of labour likely to be displaced per farm of this size if co-operatives can raise the efficiency of their working. The co-operative now employs roughly 39 man-days per acre. A more efficient management of the farm requires that it should employ more man-days. The society is unable at present to spend more on the maintenance of irrigation water, on fertilizers and manures and hence on fertilizing labour also for lack of finance. If cheap credit can be supplied to the co-operatives the society can employ at least 48 man-days per acre and increase production. It must be added that the co-operative is engaging labour at the rate of pre-co-operative days when for want of finance the individual farmers were debarred from using the optimum amount of labour and materials. If therefore easy credit can be provided to the co-operatives and steps taken to see that they function at an optimum or near optimum level not only production will increase significantly but also the amount of labour that will be employed additionally following a more efficient operation of the farm will recoup the amount of labour that mechanised ploughing now displaces, thus causing no net unemployment.

There is, therefore, no basis in the fear that co-operativisation of all peasant farms that are operating much below the optimum level in respect of using labour as well as non-labour resources will render a huge amount of agricultural labour surplus without bringing about any increase in production in the short period, provided it can be ensured that co-operatives operate around the optimum level. This evidently hold for all areas, where lands are already irrigated. One may point out that in vast areas where lands are not irrigated either by canals or otherwise the effects must justify the fears apprehended. But in fact, the hard point about our agriculture is that the number of farms and the net cropped areas under such farms that are operating much below the optimum level in using labour and non-labour resources is far too large. The multifarious factors affecting the under-optimum use of resources in our farms is a subject for separate discussion and cannot be entered into this short discussion. Broadly speaking, the principle that is widely followed in respect of resource use is the principle of the absolute minimum. This fact has been usually ignored in all calculations of the amount of labour that co-operativisation with mechanised ploughing will render redundant. Thus while it is not denied that co-operativisation of our farms with mechanised ploughing will release some amount of labour from agricultural employment it is considered that with the optimal or near optimal use of resources the net unemployment caused will be much less than apprehended.

The success or the failure of co-operativisation, therefore, hinges on whether or not it can be made sure that the co-operatives operate around the optimum level in respect of resource use and are assured of increased production even during the short period. It is very clear that if co-operatives have to work successfully, the Government must come forward with all assistance necessary to make them work optimally. The pertinent question, therefore, is: if Government assistance is in any way necessary for agriculture cannot the individual farms also fare equally well with Government assistance? "It would be misleading to compare," states Otto Schiller, "co-operative farms to which State help is given in the form of advice, credit or subsidies with individual farms left without any help. It must be examined whether state expenditures made for the promotion of joint farming would not yield the same or even better results under the conditions of individual farming, if the agriculturists are organised for the purpose in the right way."<sup>5</sup> As against this view a number of points can be made in favour of co-operativisation. Firstly, in all parts of our countryside whether with the plain or with the undulating topography the average size of the plot is too small and much land is used up in building up bunds to demarcate boundaries as well as to hold water. The average size of the plot can be multiplied several times and more areas can be brought under cultivation by destroying a huge portion of these bunds and by levelling the area with government aid. This benefit can only be taken to a very limited extent by individual farmers working on own account under separate management. Secondly, the multifarious sorts of advice, services, credits and subsidies that optimal working of our farms will need are capable of being given to farmers most effectively and with the least cost through large co-operative farms. It is quite possible that subsidies or credits given to the co-operatives may be through a collusion among the members used up in domestic consumption by the farmers rendering thereby the optimal working of the farms impossible. This possibility

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<sup>5</sup>*The Indian Journal of Agricultural Economics*, October-December, 1956, p. 5.

of the misdirection of the desired use of credit or subsidy is equally present if they are given to individual farms that rarely leave room for a distinction between the farm and the domestic need for the purpose of the use of the funds. What can be said positively in favour of the co-operative form of management of farms in this respect is that such misuse of the credits or subsidies can be reduced to nil if Governmental vigilance is directed through scientific channels and if some structural checks can be provided for within the framework of the co-operatives.

Again, there is one respect in which farmers will better safeguard their interests through co-operativisation rather than through self-management. Because complete co-operativisation of farming throughout the length and breadth of the country will provide to the farmers not only of a particular co-operative but at every spatial level of the country a perennial source of unique and powerful organisation. Thus in getting credit from Governmental sources, farmers are sometimes compelled at present to give bribes to bank officials on one pretext or the other. When with the complete or widespread co-operativisation the Government will be committed to give to the co-operative farms rights on Government credits the members through organisation will be able to stand up to their rights and save themselves from such avoidable expenses. To take another example, fertilizers supplied from Government stores are sometimes alleged to be profusely adulterated. Effective organisation among the farmers gained through co-operativisation will surely act as a means to correct a menace of the kind.

Even though it is argued above that if optimal working of the farms can be ensured the displacement of labour likely to be caused by mechanised ploughing will be within a manageable limit, it has been emphasised that some net unemployment, however small, must ensue. What are we going to do with such labour left out from agriculture? We may do something or some agency of change here or there may tend to employ them at a rather longer range. But how do we rehabilitate them immediately on their being displaced? Naturally in planning a scheme to rehabilitate them an estimate of their number is the first requisite. But with the nature of the subject it is really very difficult to make such an estimate. For one thing, farming conditions differ from region to region and within the regions. Hence it is not possible without having made a countrywide or zonal study on a rigorous scale to estimate the optimum employment potential in agriculture in the whole country or even in a state. Secondly, the extent of under-optimum operation of all the farms in the country or a state in respect of the use of labour input is not known. What is clear is that in the wake of complete co-operativisation of farms in a region most attached farm labourers and all landless share-croppers will find themselves reduced to casual labourers and this new batch of casual labourers and the vast army of the pre-co-operative casual labourers will all share the total of the pre-co-operative hired man-days in agriculture as well as in non-agricultural occupations reduced to some extent. Considering the case of West Bengal, for example, one can say that the average annual wage employment of men agricultural labourers will decrease from 246 days in agriculture and from 46 days in non-agricultural occupations. What is not clear is the exact amount of reduction that complete co-operativisation will bring about in wage employment of all agricultural labourers in agriculture and in non-agricultural occupations.

One gets frustrated if one desires to maintain the pre-co-operative employment level of agricultural labourers by seeking opportunities to rehabilitate a part in

industries immediately after the co-operativisation. If, on the contrary, opportunities are sought to employ a small part of the labour as well as non-labour population of agriculture in agricultural expansion such as livestock production on whole time basis the task will be far easier and the results quicker and surer.

The lines of arguments put forward so far can now be summed up. It is seen that the best of West Bengal's existing co-operative farms is showing as it is functioning at the present no advantage over self-operated farms of the same area. But even with the present level of working of the farm it is considered that complete co-operativisation of our farms holds out the promise of increased efficiency in the long-run. This, however, is a remote possibility and lured by this long-run prospect farmers are not likely to organise co-operatives voluntarily. Moreover, if the co-operatives cannot rise above the present level of working, complete co-operativisation of our farming in India is bound to cause in the immediate short period significant unemployment among agricultural labourers and inflict losses on a section of our farmers. Nevertheless, if it can be ensured that co-operatives can be worked optimally not only these two evils will reduce their magnitude substantially but agriculture on the whole will produce a larger output. But the optimal working of the farms is impossible to guarantee without the all-round assistance from the Government. Even then, some sort of a scheme of agricultural expansion such as livestock production will have to be launched to absorb on whole time basis a very small part of our agricultural population.

If, therefore, these two provisos, namely, the all-round Government assistance to agriculture and the carrying out of a scheme of agricultural expansion such as livestock production are thought feasible to accept, measures should be taken immediately without any loss of time for a steady voluntary co-operativisation of our farms. One way of encouraging voluntary co-operatives will be to offer special advantages to the new born co-operatives on a permanent basis.<sup>6</sup> This preferential treatment of the co-operative farms can be two-fold. First, preference may be given to remove those difficulties of co-operative farms which are also shared by all farmers of the locality. Secondly, co-operative farms are facing certain difficulties which by their very nature do not in general touch the fringe of our peasant farms.

Of the general difficulties of farming in the area under investigation two will be mentioned here. The first concerns the credit. The co-operative society takes loans from the Burdwan Central Co-operative Bank roughly at the rate of Rs. 30,000 a year, mortgaging its land assets. The law requires that 10 per cent of the amount borrowed must be held by the borrower as share in the Bank. Consequently, whenever the society has the need of a greater amount of credit it has to purchase some additional shares. But this really defeats the purpose of lending because when it is really in need of money how can it be possible for it to purchase some additional shares? Again, debt from the Central Co-operative Bank at the District Headquarters has to be repayed in March and upto then interest will be charged at the rate of 6½ p. c. per annum. In the failure of repayment in March interest will be charged at the rate of 7½ p. c. per annum. Now in March every year the price of paddy is invariably lower than in November at least to the extent of Rs. 2 a maund.

<sup>6</sup> West Bengal Government's recent announcement that it grants a cash assistance of Rs. 500 and provides fertilizers free of cost for first two years does not do much to do away with the shyness of the prospective co-operators.

Thus if the society was permitted to repay the loan in November it would not have lost Rs. 12,000 annually. Then, too, after having repaid the loan in March it is not possible for the society to borrow again within three months for procedural reasons. This creates difficulties and farming operations and production suffer.

It must be added that this type of credit is available to farmers in West Bengal against the securities of land assets. Special preferential treatment can be shown towards the co-operatives in the following manner. In the first place, short term loan may be provided for a period not exceeding one year at a pronouncedly cheaper rate to the co-operative farmers. In the next place, co-operative farms should be granted special credit for a period exceeding one year on a long-run basis and that too at a very cheap rate.

Another difficulty that is experienced by the society along with other farmers in the villages and in a great number of villages in West Bengal relates to village roads. It is well-known that during the rainy season and after, *i.e.*, in July-December the bullock and buffalo carts have great difficulties in plying through the village roads. The cart-drivers, therefore, charge four times the dry season rate in this period. The society according to its own estimate can make an annual saving of at least Rs. 6,000 if it is not compelled regularly to sell earlier due to transport difficulties in July-December. Here also it is clear that the movement of co-operative farming would receive impetus if the government accepts and declares it as a policy to link up a village to the nearest market centre with a metalled road, provided all farmers in the village combine into one or two co-operatives. Evidently, linking up a village with the market by an all-weather road will not only give the farmers a free hand in purchasing raw materials and consumption goods and in selling the produce but also bring to the villagers an array of advantages in the matter of getting new information, ideas and knowledge, education, and in the diversification of the economic activities of the village. It is not necessary for the government to bear the whole of the cost of construction of the road. Villagers are quite willing to finance and contribute labour to the construction of all-weather village roads. It is not true that with the co-operativisation of the village farms, the willingness of the large peasants to come forward to finance the construction of the village road will decline to the extent that they will no longer be the direct reapers of the farm benefits of an all-weather road. All the participating members of the co-operative will find enough reason and interest to help raise a part of the finance for the construction of the road in proportion to their land shares in the co-operative. Again, the large peasants whose willingness to sacrifice monetary resources to see an all-weather village road constructed transcends at the present that of other villagers, will find, following the co-operativisation of their farms, the prospect of engaging themselves in other productive activities also and will on that account also not feel shy to help the construction of the village roads. Finally, there are many other advantages of which every villager is aware that will make them raise at least a part of the finance necessary for road construction.

The Government must also show a preferential treatment towards co-operative farms by trying to alleviate the set of difficulties experienced only by the co-operative farms. One heavy expenditure, for example, is now made on servicing and repairing tractors. Since there are only a few tractors in the whole district no servicing station is maintained at the headquarter of the district. Hence even

for a small nut worth a few rupees the society has to send a man to Calcutta and not infrequently twice also. This means a useless swelling of the bills for the travelling allowance. On average this travelling cost varies from 5 per cent to 20 per cent of the cost of purchasing parts and of repairing. The need of going to the State capital for servicing and repairing tractors not only increases the expenses in travelling but the labour cost is also not spared a swelling. Consider, for example, that at the time of transplantation a large number of labourers have been hired and it is necessary to cultivate the lands a few times in the water before transplantation, then a tractor all of a sudden goes out of order. Naturally some one has to go to Calcutta and sometimes this means a delay of five days. It is open, of course, to the society to release the labourers and engage others when the tractor is restored to order. But such a measure is not practically possible because it will be difficult to get men immediately when the tractor is restored to working condition.

Still, the truth is that the co-operative has experienced far less difficulties in regard to repairing and servicing than it could have if it was not so near Calcutta. As has been indicated in the first section, regular bus service is available for Burdwan from the neighbouring market centre and railway travel from Burdwan to Calcutta is very easy. Burdwan and Calcutta are also linked up with a very good metalled road. Thus the region in which the co-operative is situated can easily take the benefit of servicing and repairing stations at Calcutta. Hence one way in which the Government can contribute to the spread of co-operative farms at the early stage is to encourage with a particular preferential treatment the growth of co-operatives in those areas from where both by rail and road co-operators can quickly journey to Calcutta and back. As co-operativisation will move further it will be easy and profitable to open regional tractor servicing stations.

One final word will relate to the taxation of the co-operative farms. The State Government has levied on this co-operative an income-tax of more than Rs. 8,000 for the first crop year, even though none of the members individually own taxable lands. The society is now busy in legal proceedings against such payment. Should the society be compelled to pay the income-tax the costs of production of members will rise substantially and the society will find no other alternative than to break up. If the policy of co-operativisation of our farming has got to be pushed through pure economic reasoning demands that the present practice at least in West Bengal of levying income-tax on the co-operative farms should be reversed. Members of co-operative farms with holdings however large should be exempted from income-tax, whereas all individual farmers with holdings above a minimum size should be taxed at a progressive rate. It may be suggested also that yields of such taxation may be reserved for use being made in future to finance the co-operative farms.

## CO-OPERATIVE FARMING IN INDIA

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### GENERAL BACKGROUND

Of late, a considerable discussion, both ideological and empirical has been going on in India regarding co-operative farming. The issue involves economic as well non-economic factors. Whatever system of farming we adopt, it should increase production from land, create further opportunities for employment and result into equitable distribution of incomes. In addition, such a system should be politically acceptable in the sense that it should help the community to fulfill its cherished goals, namely, (a) social justice or equality, (b) individual freedom and (c) economic efficiency. To put in Prof. D. R. Gadgil's words, one has to indicate "an approach to the problem which in Indian conditions is both economically feasible and is likely to be accepted politically."<sup>1</sup> The principal deficiencies of Indian agriculture which impede efficiency are small and fragmented lands, lack of adequate and secured interest for some of the tillers in the land, excess resources with some while lack of resources with some others, and primitive implements and methods of cultivation. The question, therefore, is which type of farming, individual or co-operative, will help to remove all or at least some of these shortcomings without at the same time asking the people to sacrifice fully or in part any of their cherished goals. In so far as the community prefers greater freedom even by sacrificing a little of efficiency, the economist has little to say except to lay bare the economic implications of such a preference.

One cannot deny the fact that co-operative farming by arranging to pool land and other resources and to pay according to one's contribution in production, helps to bring about better conditions for attaining social justice. This does not, however, mean that individual farming is not conducive to social equality. When farms are not big as in India and when measures are taken to fix the ceiling on lands so as to abolish and prevent future concentration of land in a few hands, family farms can also bring about social justice. Nevertheless, as long as individual farming partly relies on hired labour for conducting cultivation operations, there is a scope for exploitation in an over-populated economy like ours. This can, however, be minimised by taking appropriate measures such as the fixation of minimum wage for agricultural labour. But, if a choice is to be made between co-operative farming and individual farming solely on the basis of social justice, one has to prefer the former under the existing conditions. But we have to keep in mind the other two goals and take into account the aggregate impact of the chosen system on all the three goals. Herein, one cannot ignore the order of preferences of the community for these goals.

A democratic country is and should always be zealous of its individual freedom. That is why if a straight choice between individual freedom and economic efficiency is to be made, people would prefer the former to the latter. However, such a straight choice is rarely called for. There is a lot of misunderstanding

\* This paper is presented by the author in his personal capacity and, therefore, the responsibility for the views expressed is that of the author himself and not of the Reserve Bank of India.

<sup>1</sup> See Presidential Address—Fifteenth Annual Conference of the Indian Society of Agricultural Economics, 1954.

in the country regarding the fact that co-operative farming results into curtailment of individual freedom. Of course it is true that, as Dr Schiller has put it, "co-operation always means renunciation of some individual rights."<sup>2</sup> In so far as the community prefers somewhat lesser income and greater individual freedom to greater income and lesser individual freedom, the economic scientist has to take it as given and work out his approach within that framework. The extent of sacrifice of individual rights will be greater under collective farming system than under co-operative farms. Secondly, if the co-operative farms are of medium size, say 50 acres, the relations between members will not become impersonal and the individual rights receive greater attention through mutual discussions. What is required from an economist is that he should point out whether there is an alternative way for an overpopulated country to improve agricultural production without even sacrificing any element of individual freedom as is to be done under co-operative farming, and if not, then suggest if there is a way of co-operative farming which requires only a minimum sacrifice of individual freedom to attain the desired standard of improved farm production.

There is a good deal of argument accompanied with facts to prove that family farms can attain the high standard of farming which the co-operative farms are expected to reach. This is a controversial issue on which well established data are not yet available. The Gomulka Report on Poland published in 1956 stated that the value of production at constant prices per hectare <sup>3</sup> was 621.1 *zlotys* <sup>4</sup> in the case of individual farms, 517.3 *zlotys* in the case of co-operative farms and 393.7 *zlotys* in the case of State farms. About China, Shri Thapar has stated that "it is too early to say whether co-operative farming itself, as distinct from the various kinds of assistance that has been given by the State, has led to any increase in production. In any case, the average yield of these farms is not yet higher than the average yield of good individual farms in the pre-war years." It is held that given a minimum size of cultivated holding (say, above 5 acres), the yield per acre can be raised to a great extent by effecting technical development in agriculture as has been achieved in Japan. In most of the countries where high yields have been achieved, except Japan,<sup>5</sup> the holdings are big as compared with India. One may say that strictly on the basis of economic efficiency, family farms of a *certain minimum size* may be in no way inferior to co-operative farms.<sup>6</sup>

2 "The Reorganisation of Individual Farming on Co-operative Lines", The Punjab Co-operative Union, 1955, p. 9.

3 1 hectare = 2.47 acres

4 1 *Zloty* = 0.56 rupee.

5 "On an average, a peasant family in Japan cultivates only 2.5 acres as compared with 3.43 acres in over-crowded Bihar. While in India 59 per cent of the holdings are less than 5 acres in size, in Japan 95 per cent of the holdings are less than 5 acres and more than 40 per cent less than 1½ acre in size. And yet the yield of paddy in Japan is 48.1 quintals per hectare as compared with 12.2 quintals in India, 28.3 quintals in the U.S.A. and 21.5 quintals in the U.S.S.R."—Co-operative Farming: Indian Co-operative Union, para. 35.

6 As Prof. Schultz puts it: "We actually can have very nearly the best of both, namely, the family farm and also the largest output from a given set of inputs. This outcome turns on technical-economic facts, that is, on the existing transformation possibilities. These possibilities mean that the family farm can achieve as large, and in many types of farming, a larger output from a given set up of inputs than can alternative forms of economic organisation. To the extent that this is in fact true, both values can be realised in combination. The community may be prepared, however, to give up some "product" should that be necessary in order to have the family farm." Speaking about the United States, he states that "we prefer the family farm because it is a decentralised form of economic organization which has particular social and cultural advantages and because we have found it possible to develop family farm that is highly efficient in the production of farm products."—Economic Organization of Agriculture, pp. 313-14.

But the point is whether we can have family farms of a certain minimum size in an overcrowded economy like ours. Table I in the appendix indicates that nearly half of the ownership holdings in India are below five acres in size. If these farms are to become economic, some kind of co-operative cultivation will have to be introduced. Otherwise the ceiling on existing land holdings will have to be fixed so low (at the level of family holding) that radical land redistribution takes place, thereby converting a substantial number of uneconomic farmers into economic farmers. Even then, the problem is not completely solved as there is not enough land to give family holdings to all.

Our chief aim in any scheme of agricultural reorganisation should be to increase yield per acre and income per head. The pertinent question, therefore, is : does co-operative farming help to maximise the output per acre ? Can it make two blades of grass grow where formerly only one could grow ?

To answer the question under which system, production is likely to increase more, we have to ask the question as to who bears the risk of cultivation ? Under owner-cultivation, the farmer is bound to exert his best for otherwise he will be the loser. Under co-operative farming, on the other hand, co-operative farm or the farmers jointly bear the risk. The risk is not directly felt by the farmer though of course, his wages are affected at the end of the harvest according to the efforts all of them together have put in. It is likely because of this that each farmer may not exert in a co-operative farm as much as he does under owner-cultivation, in spite of whatever arrangement is made to link reward—with effort—quantitatively as well as qualitatively. It is held in certain well informed quarters that co-operative farming (in the sense of large scale farming) does not result in high yields per acre but only helps to reduce cost per unit of output. According to them, as the family farms apply the entire family labour on farm and in large cases all available labour is used in farming without consideration of marginal return for the marginal doses of labour, the yield per acre in their case is bound to be higher (assuming that all needed assistance would be given to them either directly by State or through service co-operatives) than in the case of co-operative farms wherein the managers of these farms would have to consider how much would be the rise in yield by employing additional labour. This assumes that the co-operative farm will become a managerial farm. But if the farmers who have pooled their lands into the co-operative farm work on the farm as they would have done on their individual farms, then there is no reason why the co-operative farm should suffer from lack of intensive farming and higher yield per acre and income per head. Further, the possibilities of savings in cost are far greater when the size of farm increases. Thus in comparative terms, the yield per acre may perhaps be higher on family farms whereas the cost per unit of produce may be lower on co-operative farms.<sup>7</sup> This does not however mean that, within certain given limits, there is no possibility of getting advantages of large-scale farming such as reducing the cost of production on family farms. "It is a mistake to believe that these advantages can be brought to the small cultivator only on condition that he gives up his independence and merges his holding with others to make a big managerial unit. Another mistake

7 Cf. Kasbekar: "It has been the experience in the Bombay State that in a large number of cases, the wages distributed or the maintenance advances given, in the course of a working season have far exceeded the total produce of the society."—*All India Co-operative Review*, September, 1956, pp. 310-11.

is to believe that the main advantage of large farms as compared with small holdings is represented by big field units and corresponding large-scale farming operations. To do so is to overlook the fact that the managerial functions of a large farm, apart from farming operations, include many other things such as planning, financing, investments, supply and marketing. All these other functions which contribute essentially to the advantages of large-scale operations can, however, be carried out co-operatively without merging the small holdings."<sup>8</sup>

A large number of those who advocate co-operative farming hold that in a country of uneconomic holdings such as ours, co-operative farming by enlarging cultivating units, helps to undertake a number of improvement schemes which are not possible or feasible on individual farms such as well-digging, tractorisation, levelling, reclamation, etc. Of course, it is possible to have collective projects wherein only five or six farmers together would have a well between themselves while cultivation continues to be on individual basis. But some kind of joint action becomes necessary. As regards mechanisation, it is to be pointed out that there is no scope for mechanisation of agriculture even after co-operative farms are established because of agricultural unemployment and the limited capacity of non-farm sector to absorb displaced farm labour.

It should be admitted that neither co-operative nor individual farming can help us to solve the problem of landless labour in agriculture. However, co-operative farming, by making it feasible to take up land improvements, is likely to create greater employment. But the main solution lies in the direction of absorbing that labour in non-farm employment.

It is true that with the spread of irrigation, many uneconomic units become economic. But a large number of cultivators will remain uneconomic. Where farms are of economic size, it is enough to establish a co-operative set-up for purchase of seeds and fertilisers, use of implements, etc., whereas farming as such remaining individualistic. The lands of other farmers will have to be pooled, in the national interest as well as their own, to get the benefits of land improvements and economies of scale. However, it is desirable to keep the size of these joint units within reasonable limits (between 50 to 100 acres) so that the relations between the members remain personal.

There are also a number of problems which crop up after the formation of co-operative farms. Some of these are such that a sound solution for them may not be found under a strict democratic set-up. For example, if a farmer likes to withdraw from the co-operative after one or two years, can he be given back his land without affecting the layout of the co-operative farm? If his land is in the middle, it cannot be given. Instead, he will have to be given another piece of land of equal value or price of his land. The co-operative farm will be able to show substantial increase in net return from land only if it adopts certain mechanised farm practices and other cost saving devices. This will be simply impractical and undesirable in view of labour abundance on the farm. It is doubtful to what extent the co-operative will raise output and net return from land if it cannot go

<sup>8</sup> Report to the Government of Pakistan on Reorganising Individual Farming on Co-operative Lines, F. A. O., p. 13.

ahead with mechanised farming. One has to prove yet that cultivation can be carried out as intensively on co-operative farms as on family farm. It is also apprehended that in the absence of a well-knit and competent leadership and organisational framework, the benefits of co-operative farming nicely visualised as a theoretical picture may not be achieved in practice. Leaving aside the fact that co-operative farming involves some sacrifice of certain cherished human values, it is undesirable to proceed at this juncture with a nation-wide programme of co-operative farming when the advantages of this system are not yet well established.

#### INDIAN BACKGROUND

The First Five-Year Plan (1950-51 to 1955-56) approached the question of co-operative farming as an experimental one. It did not lay down any comprehensive programme and a definite target in this respect. Only broad suggestion was made to the effect that "in any area where a majority of holders representing at least half of the total area under cultivation desire to establish a co-operative farm, legislative means should be at their disposal to proceed with the formation of a co-operative farming society for the whole village. The State on its part, should do everything in its power to encourage the establishment of such farms and to promote their satisfactory working afterwards. Farming through a co-operative calls for a number of individual and corporate virtues on the part of members. It will, therefore, be sometime before co-operative farms reach a developed stage. If during the period of the First Five-Year Plan, in representative areas of different States a good number of societies are established as going concerns we can proceed more confidently to expand that pattern of cultivation in the next Five-Year Plan." (Chapter X—para 13).

At the time of formulation of the Second Plan, the Planning Commission appointed a Panel on Land Reforms to review the progress made in the implementation of the land reform policy proposed in the First Plan and to recommend further steps to be taken in the Second Plan period. The Panel set up four committees on tenancy reforms, size of holdings, problems of re-organisation and bhodan. The Committee on problem of reorganisation was asked to make recommendations, among other things, on co-operative farming.

As far as the Committee was concerned, there was no controversy about the desirability of introducing co-operative farming as it was convinced that "if uneconomic holdings are grouped into larger units of operation through co-operative activity the economies and advantages of large-scale organisation become available and it is possible to utilise more fully, with comparatively less capital investment, the surplus man power in the intensification of agriculture, the improvement of land, houses and roads, other self-developmental activities." The Committee stated that 'development of co-operative cultivation is beset with many difficulties ; but these difficulties are not insuperable.' Though the First Plan had recommended to the State Governments to encourage and assist small and middle farmers to group themselves into co-operatives for farming, very little was done and few planned experiments were undertaken. Of course, some States have organised a limited number of such societies; but the progress is said to be very slow. The Committee held that "the reasons for insufficient progress have

been very largely psychological and organisational." The main recommendations of the Committee were :

(1) Lands in which property rights do not exist such as the surplus areas which become available on the imposition of ceilings and the Government waste lands which are fit for cultivation should be settled with co-operative groups of landless agricultural labourers for joint cultivation in units of a suitable size. As a rule, the ownership of these lands should vest in the village community.

(2) In tribal areas, where the notions of communal ownership still persist in some degree, co-operative cultivation may also be introduced.

(3) In the case of lands already under cultivation, land holdings below the floor should be brought into a co-operative pool.

(4) The cultivators holding above the floor should also be encouraged to join the co-operatives provided they agree to put their lands into the pool.

(5) Consolidation of holdings should be carried out as a preliminary step so that all surplus land obtained on imposition of ceiling and other Government lands are brought together into compact blocks. The farms below the floor should also be brought together so as to form a contiguous block to the pooled area ; this would facilitate their joining the co-operative farm at a later date.

(6) As regards pooling of individually owned lands, the Committee suggested that at this stage no rigid conditions need be prescribed and any of the alternative forms may be tried out.

The following facilities should be given by the State to co-operative farms :

- (i) credit from Government or from co-operative agencies and preference generally in financial assistance from the Government for approved agricultural programmes;
- (ii) preference against the available stock in the supply of improved seed, fertilisers and materials for local construction ;
- (iii) facilities for consolidation of lands comprised in a co-operative farm ;
- (iv) preference in grant of leases of lands reclaimed by the Government, culturable waste lands, lands whose management is assumed by the Government and lands under the management of the village panchayats ;
- (v) provision that after a co-operative farming society is formed and so long as it continues and is managed in accordance with the conditions prescribed under the law, no new rights adverse to the interest of its members will accrue. Where land is held by tenants with permanent rights, it is for them to elect to become members of a co-operative farming society. Owners of these lands cannot elect to pool their lands in a co-operative farm. In respect of lands under the cultivation of a tenant who does not possess permanent rights, an owner may join a co-operative farming society if the tenant is also agreeable to becoming a member of the co-operative farm ;
- (vi) reduction of land revenue for some period ;
- (vii) reduction of or exemption from agricultural income-tax, if any ;
- (viii) technical assistance of expert personnel employed by the Government in farm operations, marketing, preparation of production programmes, etc ;
- (ix) technical or financial assistance in developing non-agricultural employment for members of the co-operative farming society and others associated with them, such as in cottage industries, dairying, horticulture, etc., and
- (x) subsidy for managerial expenses.

The Second Five-Year Plan aims to provide sound foundations for the development of co-operative farming, so that over a period of ten years or so a substantial portion of agricultural lands are cultivated on co-operative lines. The Conference of State Ministers of Co-operation held at Mussoorie in July 1956 recommended to establish at least one co-operative farm in every National Extension Block (or about 5,000) during the Second Plan period.<sup>9</sup> The societies are to get special subsidies for management expenses, preference in offering facilities for consolidation of lands, preference in the supply of seeds, fertilizers and materials for local construction, preference in the grant of leases of Government lands, and lands under management of Government and village panchayats, preference in technical assistance, etc. The above introduction would serve as a significant background for an assessment of the working of co-operatives which is attempted in the next section.

As regards the progress of co-operative farming, details are not available. Whatever is available has been indicated in the appendix. Roughly, as stated in the Review of the First Five-Year Plan, there were about 1,397 co-operative farming societies by the end of 1955-56.

#### INDIAN EXPERIENCE

Some interesting data have been made available by the Programme Evaluation Organisation which undertook in 1955 an enquiry into the working of some of the co-operative farming societies spread over various States of India at the request of the Panel on Land Reforms appointed by the Planning Commission. In all 23 co-operatives selected by the State Governments were studied and detailed fact-finding reports are available in respect of 22 societies. We give a brief analysis with regard to 15 of them.

Out of 15 societies examined, 7 had been formed by members by pooling their existing holdings ; in respect of 5 of those, only tenancy rights had been transferred to society and in respect of the remaining 2, ownership rights had been transferred to society. Of the remaining 8 societies, as many as 5 were on land given to society by Government for colonisation or rehabilitation. Two were societies in which land allotted by Government to individuals had been pooled. The remaining one society was formed with land taken on lease from a landlord.

As regards the method of cultivation, as many as 10 societies had organised joint cultivation, 3 individual cultivation and 2 joint cultivation on a grouping basis.

An analysis of member participation in the farm operation showed that in the case of 10 societies, only some members were found to be participating in farm work, in 4 societies (of which 3 individual cultivation societies) all the members were participating and in the last society, only paid workers were doing farm operations. On the whole, about 60 per cent of the total number of members

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<sup>9</sup> The National Development Council at its meeting held in September 1957 decided that about 3,000 co-operative farming experiments should be carried out during the remaining three year period of the Second Plan. Of these, 600 are to be taken up in 1958-59.

were actually working on the farms of the society while the rest were non-participants.

Of the 15 societies, 10 were managed by the elected committees and 5 jointly by committee and officials. Five societies had less than 20 members, another 5 between 20 and 50, 4 between 50 and 100 and only one society had more than 100 members. As many as 7 societies had land between 100 and 300 acres, 4 between 300 and 500 acres, 2 between 500 and 1000 acres and the remaining 2 societies had land above 1000 acres.

As regards payment to members, 8 societies were paying usual wages at the local rates and distributing net sale proceeds according to quantum of work done. In 3 societies, cultivation was on individual basis. In the case of 2 societies, payment to working members and also payment of ownership dividend used to be decided by the managing committee. In one society working members got honorarium as well as ownership dividend while in respect of the remaining last society, as all were non-working members, ownership dividend was paid as per share in land. Both payments to participation in work and share in land were not determined on the basis of quality.

It was obvious from the composition of the working capital that Government loans and subsidies formed the largest proportion to the total working capital. Out of the 15 societies studied as many as 10 had received Government loans and subsidies and 5 were receiving grant for management expenses.

It is very difficult to arrive at a definite judgement regarding the success or failure of co-operative farming in India on the basis of above data and other available studies. Nevertheless, one has to admit that some of the societies have become inactive immediately after the enthusiastic promoters ceased to take interest. Many of the societies have been formed on lands given by Government on condition that the beneficiaries group into co-operative farms.

#### *Examples of Success*

(1) We give below an example of a society which owes its success mainly due to non-attachment to land, smallness of number of members and assured market.

The Subhash Samudayak Sahakari Shetki Sangh of Manjari, near Poona, was formed by a group of 25 residents, mostly landless, who took 205 acres of reclaimed land on lease from the Government. Trouble started when the land-owning members went away to work on their land and sent their servants to work for the society. They all collected again at the time of harvest and expected to get all the remuneration. This caused a serious rift in the society for the other members felt that since these people had made no contribution by way of manual labour, they had no right to the same return as the other members. The society came to a standstill and was revived when an efficient manager was appointed through the help of a veteran co-operator Shri Annasaheb Sahasrabudhe.

The dispute was settled by making the non-working members of the society sympathisers entitled to receive only dividends on their share capital. The working members on the land are given dividends plus daily wages, bonus and other

facilities. Thus they got wage at the rate of Rs.  $1/8$  per working day from 8 a.m. to 6 p.m. One year the bonus given was as high as Rs.  $2/12$  per member per working day. The members get free vegetables and grain at cost price.

Since the appointment of the new manager, the society has been functioning very successfully. All loans have been repaid. The share capital of the non-working members is gradually being paid up so that there will remain only working members. Member participation in the working of the society is very great possibly due to small membership. They hold weekly meetings in which all the plan and programmes are chalked out. Another factor which has contributed to the success of the society is that land is canal irrigated and soil is suited for vegetable farming as a result of which there is no seasonal unemployment. There is no problem of marketing as their produce is easily marketed in Bombay and Poona.<sup>10</sup>

(2) The Rasulabad Co-operative Joint Farming Society in Baroda district was established in 1950. 29 owners came together and leased out all their lands totalling 440 acres to the society for joint cultivation on condition that no land can be withdrawn by a member for a period of 10 years from the date of his joining the society. It is laid down that if the society had carried out any land improvement on a land which its owner wants to withdraw, that person will have to pay compensation to the society in lieu of the expenditure incurred on the land improvement.

Nine out of the 29 members are absentee landlords. The entire land is managed as one farm and members are employed on wages. The wage rate is fixed and remains the same throughout the year at Rs.  $1/8$ —per day of 10 hours work. The local wage rates vary from as. 8 to Re. 1 per day according to the season. No member holds any land outside the society. The society took over all the implements and bullocks owned by the members at the time of the formation of the society and the value of those were credited to the share capital account of the contributing members. The short-term credit needs of the society are met by the District Central Co-operative Bank while the long-term credit needs were met by the Government.

The society gives ownership dividend. It has varied from 5 per cent in a favourable year to  $1\frac{1}{2}$  per cent in an unfavourable year. After distributing dividend on share and keeping apart 25 per cent as reserve funds, the net income is divided in the following manner : 70 per cent of the net income for ownership dividend and wage amount earned in the proportion of 40 : 60, 20 per cent for charity, etc. The Government assistance so far is about Rs. 56,000 of which Rs. 35,000 are loan and Rs. 21,000 are subsidy.

The society owes its success to its chairman and his brothers who started the society. The manager is a first class graduate and commands the full confidence of the society. One may say that the society has proved successful due to good leadership and compact nature of membership.

### *Examples of Failure*

(1) The following is an example of a co-operative farming society which could not function properly owing to disputes regarding sharing of income.

<sup>10</sup> *The Hyderabad Co-operative Journal*, July, 1956.

The Cane-growers Co-operative Farming Society of Narha in Bihar was established in 1936, but took up co-operative farming only in 1949. The total number of members is 99; but only 19 are on the co-operative farm. All these 19 members do not engage in manual labour on the farm. They pooled 20 acres because they were not able to get tenants. Then another 16 acres came under the pool. A tubewell was installed. The members then started thinking that they could cultivate their lands separately. There cropped up difference of opinion about the share in the yield as it was laid down according to area without taking into consideration the differences in the quality of soil. Ultimately, co-operative farming on the first block was abandoned and it has remained on the second block because it belongs to one big landlord and a leading tenant.

The major part of the land held by the members (about 290 acres) lies outside the co-operative farm. The farm of the society could not function well even though it had a reliable executive officer and its sugarcane crop had an assured market.

(2) The following is an example of a society which is not working satisfactorily on account of the fact that members lack team spirit and that the society is Government sponsored. The Malaganhatti Depressed Class Residential Agricultural Labourer Co-operative Farming Society in Mysore State was started in 1950 on 240 acres of waste land given by the Government on lease to 43 persons. The sub-divisional officer is the Chairman and another Government hand is the secretary of the society. The net produce is divided among the members according to the work-days put in by each. Trouble arose when some members started complaining that a few of the members do not put in enough labour. The members wanted land to be divided for individual cultivation. Among the members, there is no one who has initiative and drive and who commands the confidence of others.<sup>11</sup>

#### CONCLUDING REMARKS

On the whole, the choice is extremely difficult at this present juncture when adequate factual information based on sound experience is not available. Purely from the point of view of social and economic benefits, the scale tilts on the side of co-operative farming at least in the case of palpably uneconomic holdings. But from the point of view of individual initiative and freedom, one has to prefer family farming. By way of conclusion, one may say that those family farms which are of economic size and which are cultivated efficiently need not be disturbed. Those which are too small, however, need in their own interest to be brought under co-operative arrangement. All persuasive methods should be used to organise these into co-operatives of moderate size (say 50 to 100 acres). There is nothing wrong in encouraging others also to form co-operative farms. But the chances of success in their case are not many because they are not likely to gain much by co-operative farming if their productive efficiency is already at a high level. Hence it is better to concentrate efforts and resources on the encouragement of co-operative farms of small holders. This however calls forth for remapping of village lands through consolidation programme so as to bring all uneconomic farms at one place, thereby facilitating co-operative farming by these landholders.

It may also be said that for any co-operative endeavour to succeed, the need for such co-operation must be felt by the persons concerned. Otherwise, they will

<sup>11</sup> For more examples of success and failure of co-operative farming societies, see Project Evaluation Organisation's "Studies in Co-operative Farming".

not have the sustained interest in the co-operative. Perhaps this is the reason why a well-to-do farmer is not included to join a co-operative credit society. So also a big landholder does not normally like to join a co-operative farm. It is very difficult to show sufficient advantages for such person to join the co-operative. On the other hand, the poor and small (holding below 5 acres) agriculturists have the need to co-operate for getting credit and for effecting improvements in agriculture for their own material advantage, if not for anything else. The very small farmers can jointly borrow finance from co-operative agencies when they combine into a co-operative farm. As long as pressure of population on land remains as high as it is today, a large number of farmers are bound to remain disadvantaged and hence, co-operative cultivation becomes essential in their case.

The following four policy suggestions may be drawn from the foregoing analysis. (1) There is no need to make co-operative farming as a general pattern of farming. The fields which are and which could be efficiently managed so as to yield at a comparatively high rate (especially those above the floor)<sup>12</sup> need not be asked to join co-operative cultivation. They should be members of service co-operatives to secure financial and other assistance. However, there should be no obstacle if the farmers of a certain village voluntarily decide to form a co-operative farming society. (2) Our efforts hence forward should be directed towards converting as many uneconomic farms into economic ones (say, between 5 to 20 acres) as possible. Roughly, nearly 3 crores of acres would be available for redistribution with a view to enlarging tiny farms if the ceiling on existing land holdings is fixed at 50 acres. There should be no scope for absentee ownership of land. Similarly, if the programme of development of rural industries proceeds properly, the village artisans, who at present are partly dependent on agriculture, can be made to leave agriculture. The lands belonging to the artisans can be transferred to small cultivators so as to make their holdings economic. Further, uneconomic holdings can be made economic by introduction of irrigation, consolidation and rational layout of village lands with a view to evolving economic units of cultivation. Another point though minor, needs our attention. A 20 acres farm can be economically cultivated even without irrigation whereas 5 to 10 acres farm cannot be done so. Hence, assistance to dig wells should generally be given to farmers having land below 15 to 20 acres. (3) The fields below the floor should be brought together to form compact blocks through consolidation scheme so that such cultivators may co-operate in order to avoid the disadvantages of smallness of holdings and also to gain economies of scale. Thus a land consolidation programme has to precede before palpably small farms are pooled into co-operative farms. (4) Lastly, co-operative farming in the case of these lands is to be introduced purely on the assumption that yield per acre and income from them at present are too low and that they are bound to increase when co-operative farms are established. That is, where certain development programmes such as reclamation, bunding, irrigation, etc., are likely to become economic when co-operative farms are established, then only such farms should be introduced. The second purpose of this step is to provide additional employment through ancillary works. The co-operative farms formed should be just big enough to provide benefits of economic cultivation (*viz.*, about 50 acres or so) but not so big as to make relation between farmers impersonal.

12 This may be taken as similar to the concept of "basic holding" of the Congress Agrarian Reforms Committee which is defined as the holding "smaller than which could be palpably uneconomic from the point of view of efficiency in agricultural operation."

## APPENDIX

TABLE I—NUMBER AND AREA OF OWNERSHIP HOLDINGS  
(Based on complete enumeration of holdings)

Sr. No.	State	(In thousands)									
		Total No. of ownership holdings	Total area (acres)	No. of holdings below 5 acres in size	Percentage of col. 5 to col. 3	Area covered (acres)	Percentage of col. 7 to col. 4	No. of holdings above 60 acres in size	Percentage of col. 9 to col. 3	Area covered (acres)	Percentage of col. 11 to col. 4
1	2	3	4	5	6	7	8	9	10	11	12
1.	Andhra ..	2645	18,034	1767	66.8	3,270	18.1	26	0.9	3,074	17.1
2.	Bombay ..	4764	47,204	2446	51.3	5,086	10.8	69	1.4	7,710	16.3
3.	Madhya Pradesh ..	4458	37,202	2648	59.3	5,075	13.6	60	1.3	7,617	20.5
4.	Madras ..	4958	32,549	3348	67.5	6,592	20.3	4	0.8	6194	19.0
5.	Hyderabad ..	2798	47,186	897	32.0	2,125	4.5	114	4.0	13,528	28.7
6.	Madhya Bharat ..	1429	14,643	652	45.6	1,414	9.6	19	1.3	2,024	13.8
7.	Saurashtra ..	343	8,505	34	9.9	100	1.2	18	5.2	1,533	18.0
8.	Ajmer ..	111	551	78	29.8	131	23.7	1	0.9	30	5.4
9.	Bhopal ..	123	2,255	39	31.7	62	2.7	6	4.8	770	34.2
10.	Kutch ..	78	1,824	16	20.0	49	2.7	6	7.6	628	34.4
Total ..		22818	2,09,953	11925	52.2	23,904	11.4	363	1.6	43,108	20.5

(Source:—The Second Five-Year Plan—Annexure II, p. 213).

TABLE II—NUMBER OF CO-OPERATIVE FARMING SOCIETIES IN INDIA IN 1955-1956

S. No.	State	Type	No.	Member-ship	Share capital (Rs.)	Area covered (Acres)
1.	Andhra	Land colonisation	20	2,454	N.A.	10,934
		Ex-Servicemen Tenants	7	982	3,44,000	6,274
		and field labourers	899	77,471	2,84,239	N.A.
2.	Assam		105	3,617	1,44,605	2,500
3.	Bihar*		8	124	97,930	1,230
4.	Bombay	Joint farming	73	1,854	3,34,897	9,508
		Tenant farming	145	5,730	2,23,730	28,764
		Collective farming	126	5,054	4,13,216	22,494
5.	Madhya Bharat		62	846	N.A.	2,505
6.	Madras	Land colonisation	30	2,465	3,54,000	14,726
7.	Orissa	Joint farming	9	629	7,282	1,142
		Tenant farming	4	245	6,059	1,002
		Collective farming	1	71	74	1,100
8.	Uttar Pradesh**	Joint farming	116	2,809	10,04,486	36,126
		Better farming	81	1,154	57,991	8,810
		Tenant farming	1	38	4,451	750
		Collective farming	4	92	1,74,668	2,020
9.	West Bengal	Collective farming	6	212		
		Joint farming	29	1,068	N.A.	N.A.
		Tenant farming	1	20		
		Better farming	36	1,960		
10.	Hyderabad	Collective farming	13	938	18,649	751
		Tenant farming	21	788	36,594	1,606
		Joint farming	6	477	6,947	6,070
11.	Mysore	Co-operative farming	25	2,533	44,970	10,481
12.	Punjab	Joint farming	323	4,935	19,13,000	79,215
		Better farming	118	2,468	33,550	17,251
13.	Jammu and Kashmir		3	230	N.A.	1,237
14.	Travancore-Cochin		34	3,556	1,17,962	1,910
15.	Rajasthan	Collective farming	45	867	2,70,877	8,402 bighas
		Joint farming	18	275	28,354	3,070 "
		Tenant farming	2	43	959	716 "
		Land colonisation	3	70	1,220	"
		Better farming	24	399	27,534	6,703 "
16.	Saurashtra	Co-operative farming	41	—	—	—
17.	Ajmer	Better farming	1	26	—	—
		Joint and better farming	3	32	—	750 bighas
18.	Bhopal		—	—	—	—
19.	Coorg		7	138	1,380	416
20.	Delhi	Tenant farming	6	1,728	N.A.	4,933
		Collective farming	10	258	N.A.	3,119
		Joint farming	1	10	N.A.	100
21.	Himachal Pradesh	Better farming	7	182	1,945	Nil
22.	Kutch	Joint farming	3	47	23,275	446
23.	Manipur	Tenant farming	18	—	—	—
24.	Tripura	Tenant farming	2	1,048	2,10,157	6,400
		Better farming	8	219	4,766	103
25.	Vindhya Pradesh	Tenant farming	8	313	2,520	320
		Collective farming	20	410	4,680	83

(Source: From the file of the Agricultural Credit Department, Reserve Bank of India)

N.B.: The above statement is intended to provide only a rough picture of the progress of co-operative farming in India. Detailed information is not available.

\* as on 30th June 1955.

\*\* upto March 1956.

# EXPERIENCE OF CO-OPERATIVE FARMING AND OTHER SYSTEMS OF MUTUAL AID IN CULTIVATION IN INDIA

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A study of Co-operative Agricultural Society at Kail Shikarpur, District Muzaffarpurnagar, Uttar Pradesh, was undertaken for the year 1950-51. In addition, 23 typical individual holdings also of the same village (Kail Shikarpur) were included in the study to get a comparative view of farm management problems on co-operative society as well as on individual holdings, during the same year.

## ORGANISATIONAL BACKGROUND

It was felt that there was surplus labour with some of the cultivators who had smaller sizes of holdings whereas the acute shortage of it while paralysing their agricultural operations specially during peak periods was experienced with bigger sizes of holdings. The initiative was taken by Sri Chandra Bhan Singh and Sri Sher Singh (distinguished village persons) in the establishment of this society. They were able to convince other members that the pooling of land together on a co-operative farm would open out new avenues of employment for those with smaller sized holdings and labour facilities for those with larger sized holdings. This suggestion appealed to all of them and they agreed to pool their lands on the co-operative farm voluntarily. Consequently, the society was started in February 1949 when 17 cultivators having their holdings between 10 acres and 30 acres in sizes agreed to pool their lands for joint cultivation voluntarily. Thus the membership is quite heterogeneous. The average area of land per family of the members comes to 18.77 acres.

The pooling of land was followed by mechanisation (tractor cultivation) and the cattle and human labour power were reduced considerably. Prior to the pooling of lands there were 30 pairs of bullocks, 10 he-buffaloes and 36 permanent labourers. After pooling of the lands the number was reduced to 4 pairs of bullocks, 2 he-buffaloes and 8 permanent labourers.

The farm was started with a capital of Rs. 48,000/- collected from the members in proportion to their shares. The bullocks and other farm implements were purchased from its members at their market price and according to the need of the farm. Provision for advancing loans to its members has been made by the society at 6%.

## MANAGEMENT

The organisers of the society Sri Chandra Bhan Singh and Sri Sher Singh discharged all the managerial duties of the farm and accepted no remuneration. Only a clerk (*munim*) was appointed on paid basis to maintain detailed farm accounts. Ordinarily it was not binding upon the members to work on the farm compulsorily. But during the agricultural peak periods it was essential for every member to work on the farm with all the working members of his family. Members reporting for

duty receive the wages similar to those of permanent labourers. Female workers of the member's family help in operations like cotton picking, but accept no wages taking it to be below their dignity.

### BASIS FOR DISTRIBUTION OF OUTPUT

Every member receives the produce or its money value in proportion to his share of land. All the members own their separate milch cattle and the price of fodder consumed by their cattle is debited to their accounts.

As mentioned earlier, 23 typical individual holdings were selected from village Kail Shikarpur to study their farm economy to compare it with that of co-operative farm. The selected holdings fall in six groups according to area, i.e., 5-7.5 acres, 7.5-10 acres, 10-15 acres, 16-20 acres, 20-25 acres and 25 acres and above. The average size of selected holdings comes to 21.08 acres which is considerably higher than the average size of a holding in the district.

## CO-OPERATIVE FARM VERSUS INDIVIDUAL HOLDINGS

The detailed studies regarding the intensity of cropping, percentage of area under different crops, labour utilization, bullock labour use, gross-income, expenses, profits, cultivation expenses and cost of production of important crops have been made for co-operative farm as well as for individual holdings. To have at a glance the comparative picture of various data studied, the results obtained on two types of farms are summarised below item-wise.

TABLE I.—INTENSITY OF CROPPING AND PERCENTAGE OF AREA UNDER DIFFERENT CROPS

Particulars				Co-operative farm	Individual holdings.
Intensity of Cropping .. .. .				145·00	149·00
Food crops .. .. .	Wheat .. .. .			9·53	18·47
	Paddy .. .. .			19·44	16·52
	Gram .. .. .			11·74	15·86
	Wheat and Gram .. .. .			11·20	4·61
	Maize .. .. .			2·04	1·58
	Other food crops .. .. .			9·30	0·49
	Total .. .. .			63·25	57·53
Cash crops .. .. .	Sugarcane .. .. .			16·08	15·39
	Cotton .. .. .			1·95	2·03
	Total .. .. .			18·03	17·42
Fodder crops .. .. .	Kharif .. .. .			12·29	15·50
	Rabi .. .. .			6·45	9·55
	Total .. .. .			18·75	25·05
	Grand Total .. .. .			100·00	100·00

The cropping pattern on both the types of farms does not present any marked variation. Taking into consideration the percentage area under individual crops it may be observed that area put under wheat was 9.53 per cent on co-operative farm against 18.47 per cent on individual holdings while that of wheat-gram (mixed crop) was 11.20 per cent in the case of former against 4.61 per cent for the latter. On co-operative farm with one tractor and 4 pairs of bullocks it could not be possible to do intensive cultivation required for sowing of wheat crop. Therefore, the field meant for wheat sowing were put under wheat-gram, a mixed crop which also forms a portion of staple food for the locality. In other cases, even under individual crops the percentage of area was in close agreement on the two types of farms. Sugarcane is the main cash crop grown in the locality and thus occupied about 16 per cent of total cropped area. Cropping pattern on co-operative farm was followed keeping in view the food and fodder requirement of member's family. Therefore, there could not be any appreciable variation in cropping programmes followed on co-operative farm as well as on individual holdings.

#### LABOUR UTILIZATION

TABLE II—LABOUR USED PER ACRE, PER CENT OF PERMANENT LABOUR UNUSED, AND PER CENT OF TOTAL LABOUR SUPPLIED BY CASUAL LABOUR

Type of Farm		Labour used per acre in days	Percentage of permanent labour supply unused	Percentage of total labour supply by casual labour
1		2	3	4
1. Co-operative Farm	..	27	19	55
2. Individual holdings	..	72	27	32

The total labour days used per acre are 27 and 72 on co-operative farm and on individual holdings respectively. Besides tractor cultivation responsible for reduction in total labour days used per acre, the intensity of cultivation has been reduced considerably in case of former than the latter. As regards the proper utilization of permanent labour, co-operative farm fared better than individual holdings amounting 9 per cent more reduction in the percentage of permanent labour supply unused than individual holdings. It has also been revealed by the table that the co-operative farm has to employ more casual workers amounting to 55 per cent of the total labour employed against 32 per cent in case of individual holdings.

#### BULLOCK LABOUR UTILIZATION

TABLE III—BULLOCK LABOUR USED PER ACRE, PER CENT OF BULLOCK LABOUR UNUSED AND AREA COMMANDED PER PAIR OF BULLOCKS

Type of Farm		Bullock labour used per acre in days	Percentage of bullock labour unused	Area commanded per pair of bullocks in acres
1. Co-operative Farm	..	4	66	34
2. Individual holdings	..	13	62	10

The days of bullock labour used per acre on co-operative farm are about 33 per cent in comparison to those used on individual holdings. It may be attributed to the introduction of tractor cultivation on co-operative farm. On looking into the proportion of bullock labour unused it is noted with a great interest that co-operative farming could not effect reduction in the percentage of bullock labour unused. It is due to the fact that the size of holdings in the case of majority of holdings exceeds the minimum necessary for the proper utilization of the smallest indivisible unit of agricultural equipment, *i.e.*, a pair of draught cattle with a plough. This severely limits the possibilities of reduction in bullock requirements even when the land is pooled in co-operative farms. However, the tractor cultivation increased the area commanded per pair of bullocks from 10 acres on individual holdings to 33-60 acres on co-operative farm.

#### INCOME, EXPENSES AND NET PROFITS OR LOSS

Data regarding gross income, expenditure and net profit or loss have been calculated on basis of per acre of cultivated area and also per acre of cropped area in order to have a more accurate picture having the reflection of double cropping and are presented in the following table:

TABLE IV—GROSS INCOME, EXPENDITURE AND NET PROFIT OR LOSS PER ACRE OF CULTIVATED AND CROPPED AREA

Type of Farm	(In Rupees)					
	Per acre of cultivated area			Per acre of cropped area		
	Gross income	Expenditure	Net Profit	Gross income	Expenditure	Net Profit
1. Co-operative Farm ..	353	129	224	244	89	155
2. Individual holdings ..	363	212	151	244	143	101

The introduction of tractor cultivation reduced considerably the cultivation expenses on co-operative farm. Thus the net profit per acre of cultivated area on co-operative farm comes to Rs. 224 against Rs. 151 on individual holdings which amounted to about 50 per cent higher on co-operative farm than on individual holdings. Similarly, the net profit per acre of cropped area rose to about 50 per cent higher in case of co-operative farm than in individual holdings.

TABLE V—GROSS INCOME, CULTIVATION EXPENSES AND PROFIT OF IMPORTANT CROPS

Per acre in Rupees						
Name of crop	Co-operative Farm			Individual holdings		
	Gross income	Cultivation expenses	Profit	Gross income	Cultivation expenses	Profit
Wheat .. .. .	271	125	146	259	238	21
Gram .. .. .	90	57	33	123	62	61
Paddy .. .. .	252	93	169	209	120	89
Sugarcane .. .. .	719	271	448	888	354	334

It will be seen that gross income from wheat and paddy is higher on co-operative farm than in individual holdings while it is reverse in case of gram and sugarcane. Invariably, in all the four cases the cultivation expenses are considerably higher on individual holdings than on co-operative farm. In case of wheat and sugarcane the cultivation expenses are about 50 per cent lower on co-operative farm than on individual holdings. The reduction in cultivation expenses resulted into considerably higher profit per acre on co-operative farm than on individual holdings except gram. In fact higher profit per acre on co-operative farm is not due to larger gross income but owing to the reduction in cultivation expenses. It is more marked in case of wheat and paddy. In case of paddy it may be attributed partly to the higher yields which ultimately increased the gross income and partly to lower cultivation expenses. In case of wheat also though the major credit of larger profits goes to the reduction in cultivation expenses, yet co-operative farm due to its bulk sale of wheat attracted the purchasers at the farm and could fetch better prices which contributed to more profit per acre inspite of its per acre yield being lower by about 20 per cent than individual holdings.

The following table gives the comparative figures of yield, cost of production, human and bullock labour units used on the co-operative farm and individual holdings.

TABLE VI—YIELD PER ACRE IN MAUNDS, COST OF PRODUCTION PER MAUND, LABOUR HOUR UNITS AND BULLOCK PAIR-HOUR UNITS USED PER ACRE

Name of crop	Co-operative Farm				Individual holdings			
	Per Acre				Per Acre			
	Yield in mds.	Labour hour units used	Bullock pair-hour units used	Cost of production per md. in Rupees	Yield in mds.	Labour hour units used	Bullock pair-hour units used	Cost of production per md. in Rupees
Wheat ..	8.49	125	35	12.32	11.01	272	148	19.78
Gram ..	5.04	86	20	9.61	6.86	89	35	10.99
Paddy ..	20.07	289	31	4.63	16.00	317	42	7.86
Sugarcane ..	345.00	109	23	0.50	445.00	394	88	0.73

The yield per acre of all the four important crops is lower in co-operative farm than on individual holdings, except paddy. The variation is more marked in case of sugarcane, the main cash crop of the region where it is about 70 % of that obtained on individual holdings. It is also interesting to note that inspite of lower yield, due to exceptionally lower cultivation expenses, the cost of production per maund of all the four important crops is considerably lower on co-operative farm than on individual holdings. The reduction in cost of production per maund has been by about 40 per cent in case of wheat and paddy while it is 32 per cent for sugarcane and only 13 per cent in case of gram.

The labour hour units used for growing per acre of gram and paddy are more or less the same on the two types of farms. In case of wheat and sugarcane, it is only 46% and 28% respectively on co-operative farm in comparison to individual holdings. The bullock labour utilization too is invariably lower in case of all the four crops on co-operative farm than on individual holdings. In case of wheat and sugarcane it is only about 25% of that used on individual holdings.

#### FATE OF THE CO-OPERATIVE FARM

Though the present study relates to the year 1950-51 only, to ascertain the progress made at this co-operative farm, I visited this farm in June, 1955 and learnt that the farm could not be run successfully on co-operative basis and has been dissolved finally in January, 1955. The following were the reasons attributed for its failure : (i) The difference in the soil fertility of different partners. In fact the land of few members was extremely poor in fertility while they too received the produce in proportion to the share of their land. It was objected by others, with good type of soil in their lands. (ii) The members with small size of holdings argued that by following intensive methods of cultivation their out-turn was comparatively equal to those having  $1\frac{1}{2}$  times of more land. Here they too received shares of the produce in proportion to the land pooled without any other consideration. Thus they found themselves under a loss. (iii) The partners belonged to different groups of families in the village and a complete co-ordination could not be possible among them. (iv) The members who took loans from the society to meet various requirements usually for carrying on trade, suffered losses and could not repay it in due time. This weakened the financial position of the society. Further the members showed more interest in their own work than in the working of the society. (v) In the tehsil, the consolidation of holdings was in operation. This village too was to be consolidated very soon. The members feared that by remaining in the society they will not get good quality of land. (vi) Lastly, in spite of efforts for 4 or 5 years the society could not be registered with the result that no binding could devolve upon the members of the society.

#### RESULTS OF THE INVESTIGATION

As revealed by the investigation, the points on the debit side of co-operative farming are :

(1) *Low Standard of Management*:—The spirit of treating the work on the co-operative farm as their own has not yet been developed among the members. In daily work, the general tendency is to start it late and to work less. Thus the management efficiency is the worst victim of the co-operative system of farming.

(2) *Less Production* :—No demonstrable increase in yield per acre has been evidenced on co-operative farm as compared with individual holdings, rather it is just the reverse. The possible causes are : (i) agricultural operations are often delayed due to slackness of member-workers ; (ii) the various operations, for reason already stated, are not as thoroughly and carefully done as on the individual holdings ; (iii) the agricultural problems of the area have not yet been fully investigated; hence there is hardly any really improved variety of crop or improved practice worth adopting on the farm. Therefore, the co-operative system of farming which implies increased opportunities and convenience for improved and intensive farming has, in fact, proved quite helpless in effecting improvements over the local methods of farming. The cultivation on co-operative farms is as extensive as on the individual holdings.

The points on the credit side of the system of co-operative farming are :

(1) *Economy in Bullocks* :—The area commanded per pair of bullocks has increased from 10 acres on individual holdings to 33.60 acres on co-operative farm. However, this increase cannot be ascribed totally to the pooling of land. It has already been stated that the average size of holdings in this area approximates almost to the optimal unit necessary for proper utilization of the bullocks. There is no improvement in the efficiency of bullocks. The economy of bullocks has been achieved by the introduction of tractor cultivation.

(2) *Better Use of Labour Resources* :—Many of the members and their families, who work on hire basis on the co-operative farm, would not have accepted to work as labourers for wages on private holdings as it would have undermined their social prestige. Their contribution of labour to farm work which, without co-operative farming, would have simply been a waste, is indeed a significant gain. The percentage of permanent labour supply also was 19 on co-operative farm against 27 per cent on individual holdings.

(3) *Economy in Marketing Costs* :—Because of bulk sales it has been possible to get the advantage of the *mandi* rates at the farm itself, thereby saving the transport charges upto the *mandi*. The possibilities of malpractices, of underweighment, etc., and unauthorised deductions are reduced to nil. The co-operative farm was able to sell their wheat to the Government and get the benefit or the premium at 12½ per cent over the market rates.

(4) *Economy in Operating Cost* :—The operating cost on the co-operative farm is lower being Rs. 129 per acre as against an average of Rs. 212 per acre on individual holdings. The low operating cost is not due to better management but has partly been achieved by a reduction in the usual number of agricultural operations and partly as a consequence of adopting tractor cultivation.

To sum up, if a straight answer is asked on the first point of reference, *i.e.*, whether the organisation of co-operative farming society has led to demonstrable increase in efficiency in production, the answer is in the negative. But, for correct appraisal of the full implications of such a conclusion, it must be stated that it is like passing judgement on a thing which in reality does not exist. To make it more clear, the farm studied although worked as co-operative farm, lacks the essential feature of co-operative farm, *i.e.*, the spirit of co-operation.

Another fact to which attention needs to be drawn is that the necessity of the people for co-operative farming in this area on economic considerations is much less as compared with areas having much smaller holdings. The resulting benefits from co-operative farming in the form of intensive cultivation have also been nil.

#### SUGGESTIONS

##### *Management of Co-operative Farms*

For the day to day operations, it is necessary that the responsibility of management be fixed on an individual. He should be a full paid man instead of being an honorary worker. Subject to the formulation of general directives and policies by the General Body and the Executive Committee of the co-operative farming society, the person so selected should be given full powers to manage the farm affairs without any interference from the members. Decisions once arrived at by the appropriate committee of the society should be enforced by the manager impartially and firmly without any fear or favour.

##### *Agricultural Improvements*

Agricultural researches should be intensified with a view to evolving suitable improved varieties of crops for the locality. New crops and rotations capable of higher returns should be introduced. So far little agricultural research has been done on the problems of this region.

##### *Reserve Fund*

Emphasis should be shifted from distributing high dividends on to the building up of strong reserves. Through educative propaganda and persuasion, the members be made to realise the importance of this fact in the very interest of the stability and the continuation of co-operative farming.

#### CONCLUSIONS

The lessons learnt have certainly wider significance than mere counting of gains and losses in maunds or in terms of money. Co-operative farming has led to better utilization of labour resources and this is of great importance for areas which are faced with labour scarcity. The members belonging to higher castes also work on wages on the co-operative farm without any feeling of loss in their social prestige.

It has also provided valuable practical experience which should prove very helpful in avoiding pitfalls in organising and running co-operative farms elsewhere.

For translating any progressive scheme into practice successfully it is essential that the people themselves should be well prepared to welcome, accept and work such an idea. The investigation brings forth clearly that the farmers are yet ill-prepared for co-operative farming, which being the highest form of co-operative endeavour requires the largest understanding of co-operative principles and the highest degree of co-operative spirit. While ultimately the degree of the preparedness of the people is governed by the general progress in the sphere of education,

community living and successful working of community organizations, it is, however, true that the best, surest and speediest way for preparing the people is by letting them have an opportunity to organise and manage practically the co-operative farms themselves. The method of co-operative farming most suited to people's educational, moral and intellectual equipment should be evolved by process of trial and error. The failure and liquidation of a co-operative farm here and there should cause no consternation or alarm. The rigidity of rules should not be allowed to hamper the evolution of co-operative farming suited best to people's temper.

The provisions of the Zamindari Abolition and Land Reforms Act in regard to co-operative farming have made the task of organising the co-operative farms easy. It provides facilities for exchange of holdings, consolidation and finance for organising the co-operative farming societies. Moreover, once the land is pooled and registered in the name of co-operative farm, the power to withdraw the land out of the pool as and when desired does not rest with a few individuals. The non-registration of the pooled land in the name of Kail Shikarpur co-operative farming society for a period of four or five years is responsible to a greater extent for the liquidation of the society.

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### EXPERIENCE OF CO-OPERATIVE FARMING AND OTHER SYSTEMS OF MUTUAL AID IN CULTIVATION IN THE MADRAS STATE\*

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"Two are better than one, because they have a good reward for their labour. For if they fall, the one will lift up his fellow; but woe to him that is alone when he falleth and hath not another to lift him up" (*Ecclesiastes* iv 9—10). The quotation reveals that co-operation was looked upon as a source of strength to meet adversity even in Biblical times. But co-operative farming, as a mode of operation to increase agricultural efficiency has come into prominence lately. This does not mean that various forms of joint endeavour and mutual aid in cultivation have not prevailed from time immemorial in our country. The joint family system on which Hindu society is based is a unique example of co-operation in cultivation where members of a vast household congregated together under one roof with common living and kitchen facilities. Besides the family, the community consisting of the village was also a unit closely knit to meet common foes and depredations. Though these ties are being rent asunder by the inexorable advance of modern civilisation there are many instances where the old bonds still continue to prevail. In many parts of the Madras State mutual aid in peak seasons is a common feature. Families help each other out with inevitable chores during busy periods. Similarly, water can be given free or as a loan by a neighbour if the well of a farmer gets dry. But these forms of complementarity are becoming things of the past and are also unorganised and unco-ordinated. Thus in Coimbatore District the repeated failures

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\* The views expressed in this paper are the author's own and do not reflect the policies of the Government of India or the Government of Madras.

of monsoons has led to the jealous preservation of one's water sources rather than helping needy neighbours out. The same applies to sharing of labour.

#### SYSTEMS OF MUTUAL AID IN CULTIVATION—BETTER FARMING SOCIETIES

Under this category there were 90 co-operative better farming societies in the Madras State on 30th June, 1955 out of 15,100 societies in the residuary Madras State (including Malabar and South Kanara districts).

##### (a) *Agricultural Improvement Societies*

The objects of these societies are to propagate and supply pure seeds, to find a sale of the produce of their members through the marketing societies, to purchase and maintain agricultural implements for the use of their members and to disseminate among the members the knowledge of the latest improvements in agriculture by actual demonstration caused to be carried out by each individual member on his own land according to the advice of the Agricultural Department. There were 49 such societies as on 30th June, 1955 with a membership of 8,548 and a paid up share capital of Rs. 1.48 lakhs. During 1954-1955 they disbursed loans to the members to the extent of Rs. 5,614/- and supplied improved seeds, manures, agricultural implements and cattle feed to the value of Rs. 1.73 lakhs.

##### (b) *Agricultural Demonstration Societies*

The objects of these societies are the same as the Agricultural Improvement Societies but they purchase or take land on lease and cultivate it under the advice of the Agricultural Department to demonstrate the profitableness of new methods of cultivation. On 30th June, 1955 there were six societies of which the most famous is the Lalgudi Sivagnanam Agricultural Co-operative Society in Tiruchirapalli District. This society had 1,012 members and in 1954-55 distributed manures to the value of Rs. 3.36 lakhs, seeds to the value of Rs. 1,448/- and implements worth Rs. 475/-. It issued produce loans to the extent of Rs. 1.14 lakhs. In 1947 the Government alienated to it 245 acres of dry land in Naikulam village for demonstration of dry crop cultivation on improved lines. The Government have given the following financial assistance to the society for running the dry farm at Naikulam: (a) a subsidy of Rs. 15,000/- for sinking five wells, (b) Rs. 15,000/- for purchase of oil engines and pump sets, (c) a subsidy of Rs. 5,770/- for the construction of a godown at Naikulam and (d) the services of an agricultural demonstrator at half cost. The Madras Committee on Co-operation (1956) has recommended (165) that the dry farm run at Naikulam village by the society may be taken over by the Government itself and run as a demonstration farm. Recommendation 167 states that agricultural improvement societies may be amalgamated with marketing societies or liquidated. In each taluka it is recommended (170) that at least half a dozen village credit societies must run demonstration plots. Government is desired to give technical help through their officers for this purpose and also liberal subsidy.

##### (c) *Irrigation or Kudimaramath Societies*

The objects of these societies are to undertake the maintenance of tanks and water courses and the regulation and supervision of the supply of water to the

members' lands and to purchase or hire modern appliances for the irrigation of their members' lands. There were 18 such societies on 30th June, 1955 with 1,941 members and a paid up share capital of Rs. 11,036/-. The value of irrigation works done during the year amounted to Rs. 14,807/-. The Madras Committee on Co-operation (1956) has recommended (168) that separate irrigation societies may be formed only if local village credit societies cannot be entrusted with the work of these societies. The Revenue Department, it is recommended (169), may effectively help the irrigation societies in the enforcement of recovery of contribution from non-members towards the cost of repairing and maintaining water ways, tanks, etc. Since water is the chief essential for successful agriculture it is necessary that more of such societies should dot the length and breadth of the country especially in view of the poor state of many irrigation channels and tanks.

#### *(d) Societies for the Consolidation of Holdings*

There were seven such societies as on 30th June, 1955 but almost all of them were in a moribund state. The Madras Committee on Co-operation has recommended (166) that the existing societies for consolidation of holdings may be liquidated if they have no chances of realising the object with which they were formed. Where they have prospects of working successfully Government may liberally aid them by giving free services of staff and also full concessions in respect of registration charges, etc. Consolidation is a very important concomitant of co-operative or even individual farming. Hence such societies need encouragement and guidance.<sup>1</sup>

### CO-OPERATIVE FARMING—MICRO-ECONOMIC TYPES

#### *Tenant Farming Societies or Land Colonisation Societies*

(1) *On Government Lands:*—There were 30 co-operative farming societies of the tenant farming type in the Madras State for agricultural labourers and ex-servicemen and they have brought under cultivation 8,055 acres of lands upto 30th June, 1957. The idea is to settle *harijans* and the landless poor on land. The membership in such societies is open to (a) local persons belonging to communities which are eligible for help by the Labour Department and who have an agricultural bias, (b) other landless persons of the locality and (c) members of the communities specified against (a) residing in adjacent villages who are willing to settle near the lands granted by the society. These societies are designed to improve the economic condition of the landless labourers with an agricultural bias and to increase food production by reclaiming waste lands. The lands assigned to these societies are divided into holdings of 3 to 5 acres and allotted to members who cultivate them individually. The members have only occupancy right and have no rights to sublet or mortgage the lands. There are separate land colonisation societies for civilians and ex-servicemen.

Assistance by the Government for the civilian land colonisation societies takes the form of (a) free grants of Rs. 10/- per colonist for investment as share capital in the society, Rs. 5 to 10 per acre for purchase of manure in the first year

<sup>1</sup> See an article by Dr. Baljit Singh in the *All India Co-operative Review*, October, 1957.

only, Rs. 5/- per acre of dry land and Rs. 10/- per acre of wet land for purchase of seeds for the first crop only and Rs. 125/- per colonist for purchase of bulls; (b) interest free loans of Rs. 50/- per colonist for purchase of implements repayable in 10 annual instalments, Rs. 125/- per colonist for purchase of bulls repayable in five annual instalments and Rs. 25/- per acre for reclamation; (c) miscellaneous free supply of materials for putting up of huts, free service of senior inspectors or Agricultural Demonstrators, waiver of land revenue assessment and water cess for the first three years. Financial assistance is also given on the merits of each case for starting cottage industries. On 30th June, 1955 the total paid up share capital of the then 24 land colonisation societies was Rs. 133,235 of which Rs. 12,920/- was contributed by Government as free grant. A special free grant of Rs. 500/- was given to the Moranum Land Colonisation Society in the North Arcot District for the introduction of the coir industry in the colony to supplement the income of the colonists. The members of the Athani, Andiyur and Gettisamudram Land Colonization Societies in the Coimbatore district took up sheep rearing, poultry farming, bee keeping, handloom weaving as subsidiary occupations. The members of the Valkalrathan Land Colonisation Society in the North Arcot District undertook the production of mats and ropes with the help of the subsidy sanctioned out of the District Amelioration Fund. The members of the Mettupatti Land Colonisation Society in Salem attended to the tapping of sweet juice from the palmyrah trees and manufactured jaggery in the off-season.

## (2) Colonisation Societies in respect of Private Land taken on Lease

(i) The Marudur Land Colonisation Society in the Tiruchirapalli District had 48 members with a paid up share capital of Rs. 4,705 on 30th June, 1955. Government sanctioned a loan of Rs. 80,000/-. 346.31 acres were allotted to the members for cultivation and out of which 301.29 acres were cultivated. The value of the total yield of food crops and commercial crops amounted to Rs. 17,740/-. The society is working at a loss from its inception. The possibilities of working it on profitable lines by undertaking the cultivation of sugarcane is under examination.

(ii) The Nelvoi Land Colonisation Society in Chingleput District had 89 members with a paid up share capital of Rs. 3,492/- at the end of 30th June, 1955. 97 acres were brought under cultivation. The Palar river is the main irrigation source for the colony lands and owing to faction in the area with reference to bailing of water from the river the affairs of the society have been at a standstill.

There were six land colonisation co-operative societies for ex-servicemen.

## (3) Reflections on Tenant Farming Societies

In most parts of India the above type is the only one which has been adopted in the shape of co-operative farming. Thus in the Bombay State of the 350 farming societies organised, only 40 are of the co-operative joint farming kind and all the others are organised on lands made available by Government of which half are of the tenant farming variety, *i.e.*, cultivation is on family basis though the rights in the lands vest in the society. In Madras State the dominance of this type is still greater and only recently sporadic attempts are being made to introduce joint farming societies. As Shri P. D. Kasbekar points out,<sup>2</sup>

<sup>2</sup> *All India Co-operative Review*, September, 1956, pp. 307-314.

the lands which the Government can grant are necessarily waste lands in the possession of Government and such lands are given "to the lowest among the have-nots", viz., to the landless agricultural labourers preferably those who belong to the backward classes. The combination is of inferior land with inexperienced and resourceless grantees. The object of the Government in organising such societies is not so much the promotion of the movement of co-operative farming as to find a convenient agency for the task of the settlement of landless labourers. Very often, especially in the Bombay State it is found that the success of these societies is largely due to the personality of the imported managers. Also there is a limit to the investment that can usefully be made in inferior land to increase its productivity. Hence the salvation of the members of such societies lies not exclusively in the produce of the land but in other ancillary activities also such as rearing of milch animals, sheep rearing for wool and for meat, poultry farming, etc. This fact has been at the bottom of a special scheme that is now in operation in the Bombay State, viz., "The Intensive Development Scheme of Co-operative Farming." The purpose of this scheme is to enable farming societies by means of financial assistance to undertake whatever ancillary and subsidiary activities they are capable of or have an aptitude for, so that the total productivity of the group constituting the society is increased. In Madras State also it was observed that subsidiary activities form an important part of land colonisation societies.

It is necessary that new orientation should be given to tenant farming societies by assigning them better lands, imparting training in cultivation to the members and organising subsidiary activities.

#### JOINT FARMING SOCIETIES

This type involves pooling of lands and cultivation on a joint basis. Misgivings have been voiced in many quarters regarding the feasibility and success of such ventures. Thus the Madras Committee on Co-operation, 1956, observes: "habits centuries old are not changed in a day and habits rooted in the soil are with difficulty changed at all. Each farmer will have his own estimate of the yielding capacity of his own land and it will be difficult to secure a measure of unanimity among the farmers on the fixation of a basis for the division of net income or net yield. Unless the prospect of his getting an increased yield is fairly certain a farmer will not agree to joint farming and having entered the pool, if he finds that the increase in his share of the produce is not considerable, he is sure to back out." It lists the following disadvantages of joint farming.

(1) In individual farming each cultivator and his family work on the fields and contribute their labour. When they work on the joint farm the labour will have to be paid for in cash which means extra expenditure for the society.

(2) When the farmer and his wife work on the joint farm for wages the quality and output of labour will be less than what it would be when they work on their own farms.

(3) When lands are cultivated individually supervision could be done more effectively and at no cost. The Committee firmly believes that no compulsion

should be applied even when 75 per cent of the farmers in an area owning not less than two thirds of the lands agree to joint cultivation. This belief was also shared by the Land Revenue Reforms Committee. The 1956 Committee states that all the advantages of large scale economy can be secured by the peasants co-operating in carrying on their profession except actual farming. Wherever people come forward to carry on joint farming on a co-operative basis all necessary help may be given by the Government.

In the Madras State organised efforts are now afoot in the direction of forming co-operative farming societies of the joint farming type wherever the people come forward voluntarily to pool their holdings and cultivate them jointly.

*(a) The Valandur Co-operative Joint Farming Society—Madurai District as on 30th June 1957*

This society was registered on 7th July, 1956 and started its work on 17th September, 1956. The area of operation of this society is confined to Valandur revenue village of the Thirumangalam taluk. The main objects of the society are (i) to pool land, labour and capital of the members and carry on agricultural operations jointly on up-to-date methods, (ii) to put up engines and pumpsets to provide irrigation facilities and to provide electric power to run them, (iii) to issue loans to members for the purchase of milch animals and for the promotion of cottage industries activities among them. The authorised share capital of the society is Rs. 5,000/- made up of 5,000/- shares of Re. 1/- each. There were 217 members on the role with a paid up share capital of Rs. 226/-. The Government have sanctioned a subsidy of Rs. 2,200/- towards share capital.

The maximum borrowings of the society should not exceed 50 per cent of the net assets of the members amounting to four lakhs. The Madurai District Co-operative Central Bank has sanctioned a cash credit of Rs. 70,000/- for cultivation expenses and this is guaranteed by the Government. According to by-law No. 15, every member should contribute at the rate of one anna for every rupee of wage earned by him towards his thrift deposit. There are 207.51 acres of wet lands in this village of which only 118.06 acres were brought under society's cultivation. Since there was no time the society took up cultivation in the fields as they existed on sites without making much realignment of plots. The entire area was put under paddy cultivation under the Japanese method with technical advice from the Agricultural Department. Members and non-members worked in the farm and got daily wages, the rate of wages being fixed by the board meetings.

The average yield per acre excluding wages paid in kind worked to 18½ bags of 48 Madras measures each (1 Madras measure=2.5 lbs.). When the members were cultivating their lands the average yield per acre was 15 bags of 48 Madras measures each. The society has marked an increase of 26 per cent in production. After deducting the cultivation expenses from the gross yield, not exceeding 60 per cent of the net income of the land brought under joint cultivation can be distributed among the members in proportion to the value of land entrusted by each for cultivation to the society. The net yield came to Rs. 27,735 and the maximum value of produce that can be distributed among the members is 60 per cent of this, i.e., Rs. 16,641 (by-law No. 28).

Rs. 20,000/- has been disbursed to 100 members at the rate of Rs. 200/- per member for the purchase of milch animal and the members have supplied milk through the society to the Madurai Co-operative Milk Supply Union.

According to by-law 25, the members shall entrust to the society through an agreement or contract all the land in their possession for joint cultivation. A store is run on no profit no loss basis for the benefit of the members. A school, community hall, cattle-shed, godown, reading room and latrine are under construction. The society is at present sinking a well at an estimated cost of Rs. 6,500/-. After completion this will irrigate 50 acres of land. The Government have sanctioned subsidies to the extent of Rs. 3,200/- and interest free loans repayable in 5 to 15 years of Rs. 32,500/- for work bulls, wells, pumpsets, reclamation cost, agricultural implements, processing equipment, etc. The Government have also sanctioned some staff, free of cost to the society.

The poor return of 7 bags per acre that each individual got as his tentative portion of the profits of joint farming was due to the disproportionate expenditure on cultivation occasioned mainly by the low outturn of work on the part of the members themselves. If the members co-operate and apply whole-hearted efforts as they do to individual private cultivation in future years there will be a success story to tell. Group cultivation contemplated as an alternative to direct cultivation presents difficulties of profit-sharing between the cultivators forming the groups as well as between the groups and the society.

*(b) Nathagoundenpudur Co-operative Joint Farming Society, No. K. 1600—Coimbatore Taluk*

This society was started as recently as 13th June 1957. The area of operation is confined to the limits of Pooluvapatti revenue village. Its objects are (i) to pool the land, labour and capital of the members and carry on agricultural operations jointly on up-to-date methods, (ii) to arrange for reclamation and levelling of lands, to put up bunds and carry out other improvements to make the land fit for cultivation, (iii) to put up engines and pumpsets to provide irrigation facilities and to provide electric power to run them. (iv) to undertake supply of water to the bunds from tanks, supply channels and wells and to regulate the distribution of water, (v) to keep the tanks, channels and water courses in a state of good repair and to carry out works connected therewith, (vi) to hire or own cattle, agricultural implements, modern machinery and appliances and such other work incidental to and conducive to the working of the society.

The authorised share capital is Rs. 5,000/- made up of 5,000 shares of Re. one each. There are 24 members with a paid up share capital of Rs. 395/- in the society. The society has pooled 105.45 acres of land from 24 members for joint farming operations under the scheme. The reasons for the willingness of the members to entrust the land to the management of the society is the hope that the dry land will soon be converted into garden land by digging two big wells. The lands are in a compact block in the Nathagoundenpudur village. The Government has given financial help in the shape of an interest free loan of Rs. 24,000/- repayable in 20 years commencing from third year onwards. The loan has been sanctioned for the following purposes—Rs. 2,000/- for trial boring, Rs. 15,000/- for two wells

and Rs. 7,000/- for the purchase and installation of electric motor pumpsets and pipes.

Government have sanctioned the loan of the services of a Co-operative Senior Inspector free of cost to work as the Manager of the society for a period of one year from 13th June, 1957. Government have also guaranteed the repayment of a loan not exceeding Rs. 33,000/- that may be advanced by the Coimbatore District Co-operative Central Bank to the society for cultivation expenses. The Assistant Director of Industries and Commerce, Coimbatore, has granted the loan of services of a hand boring set to the society for sinking trial bore wells.

The present crop, *i.e.*, *cholam* (jowar) is sown individually by the members at their expense. The society will be able to undertake joint cultivation under the scheme after the sinking of wells is completed and installation of pumpsets is over.

*(c) Thengu-Marahada Co-operative Farming Society in the Nilgiris District*

This society had 139 members with a paid up share capital of Rs. 88,275/- at the end of the year 30th June 1955. Out of the 500 acres leased to the society by the Government, 376 acres were reclaimed and brought under cultivation. The society conducted a demonstration on a plot of 60 cents. For the benefit of the members and the labourers the society had a stores branch. The society owned 5 bulls for being hired to the members. Government sanctioned a Schindi breeding bull free of cost to the society. A dispensary and an elementary school were run by the society. During the year 1954-55 the society earned a net profit of Rs. 14,374/-. Another society of the same type has been formed at Sivagiri in the Chingleput District and proposals are on hand for the formation of a joint farming society at Bakkapuram in the Nilgiris District.

*(d) Reflections on Joint Farming Societies*

The limited experience at Bombay has shown that except, where, on account of formation of co-operative joint farming societies group irrigation has become possible the scope for better utilisation of land by the mere fact of pooling the land has not been found to be as much as is usually assumed. This shows the necessity of conducting more experiments in joint farming to see whether and if so, to what extent, and under what conditions the benefits of co-operative farming in the matter of increased production at reduced costs can be realised. "The real contribution of a co-operative joint farming society may ultimately turn out to be not so much in the field of agricultural productivity of the land, as in increasing the total productivity of the group constituting the society by means of inclusion of ancillary and subsidiary activities. Therein may lie the future of co-operative farming but all this has to be tried and concretely seen."<sup>3</sup>

Enlightened leadership within the group constituting the society is also essential. The leadership is to be there not only of the technical nature but also moral. The unwillingness of the members to submit to experimentation will be overcome if a few enlightened leaders hold the torch. This is not only true in the sphere of joint farming but also of all aspects of cultivation.

Another observation is that members are unwilling to take the plunge unless there is a guarantee by the State. In other words, the State will have to guarantee to the individuals offering to form a co-operative joint farming society that their income from the society will not be less than the income derived from their land before joining the society, and that if there should be any reduction in their income the deficiency would be made good by the State. The guarantee may be for a limited period—say for 5 years. Thus in Valandur if the members are assured of a guaranteed return they are willing to lease their land for direct cultivation to the society. The members wanted a return of 12 bags of 60 Madras measures of paddy per acre for the wet lands and six bags for the dry lands per year in toto for the lands leased out to the society by way of lease, dividend or bonus.

Hitherto the practice had been to give subsidies to the societies but institutional subsidies have served as ineffective inducements for overcoming individual reluctances. The institutional subsidy will, therefore, have to be substituted by individual assurance if people are to be found in sufficiently large numbers to participate in the experiment of co-operative joint farming.

#### COLLECTIVE FARMING SOCIETIES

##### *Land Reclamation Societies—Gramdan Villages*

Landless persons form themselves into a society which takes on lease a block of land, cultivates it through members who are paid wages and apportion the net yield among them in proportion to the labour contributed by each as is found in Lombardy and Emilia in Italy to combat the evils of rack-renting and under-employment.

Under the scheme sanctioned by the Government in 1944 for the reclamation of uncultivated patta lands in the Cauvery Mettur Project area 35 societies were selected to reclaim an extent of 6884.11 acres. Government advanced long term loans repayable in 15 years for the reclamation of lands at the rate of Rs. 50/- per acre and the Tanjore Central Bank provided short term credit facilities for the purchase of cattle and cultivation expenses. The 35 societies had on 30th June 1955, 7388 members with a paid up share capital of Rs. 78,126/-. The entire extent of 6,884 acres proposed to be reclaimed has been reclaimed. Loans to the extent of Rs. 167,315/- were advanced to 28 societies for the reclamation of lands. Eight societies constructed godowns at Rs. 3,000/-, to each of which half the amount was sanctioned as loan by the Government.

In 1953 Government sanctioned a special scheme for the reclamation of 469.70 acres assigned to the Nambivoyal Land Reclamation Society, of which 16.08 acres were found to be unfit for cultivation and 5.06 acres were reserved for a tank. The remaining 448.58 acres were assigned by the society to 165 members and the entire extent was reclaimed and brought under cultivation by the members.

Collective farming is possible in areas with large holdings. Out of 41 lakhs of land holdings in Madras State, 1,616 holdings comprise more than 300 acres of "converted dry" or 100 acres wet lands mostly belonging to religious institutions as in Tanjore and South Arcot. Section 6 of the Tanjore Tenants and Pannaiyals

Protection Act provides that the cultivating tenant have the right to continue in enjoyment of the tenancy for a period of 5 years from 1952-53. When the existing tenancy agreements disappear new agreements could be made by the collective farming societies with Government guarantee, if necessary. Similarly, public or Government arable lands and cultivable wastes could be utilised for farming such societies. Proposals are on hand for the formation of a collective farming society at Randham in the North Arcot District.

The organisation of more co-operative farming societies of the collective type has also become possible on account of the lands made available under the Bhoodan Yagna. A co-operative farming society has been registered recently at Thannirpandalpudur in the Coimbatore District where Bhoodan lands covering an extent of 300 acres are proposed to be utilised for the benefit of 60 families of landless people. The Gramdan movement which is spreading slowly in the country affords the most congenial climate for the successful operation of co-operative farming organisations.

The Madras Committee on Co-operation, 1956 has stated that there is no objection to the formation of collective farming societies where people come forward to work on such lines. It has recommended (176) that such experiments may in the first instance be tried when large blocks of Government lands are assigned to co-operatives for colonisation and Government may give all the assistance required.

#### *(b) Reflections on Collective Farming Societies*

The Government lands available for distribution to the collective farming societies are limited in extent and vary in quality and fertility. Hence any policy of apportionment is bound to result in disparity giving rise to patchy results in some cases and glorious success in others.

Another factor to be taken into account is the inexperience of the settlers. Besides, members of the same community or of the same religious faith imbued with a burning zeal, as in the case of the Jews and the *Kibutzim* in Israel alone can make the societies a success. It is difficult under Indian conditions to repeat the performance of Palestine or in a democratic context to emulate the exploits of Soviet Russian or Chinese collectives. Considerable training and discipline to work as a team to share common burdens and toils and to lead a life of "tears, sweat and blood" in the initial stages will be required. These points have been stressed by the Kumarappa Committee of 1950 also.

A third point lies in the paucity of experienced managerial personnel. This can be rectified in course of time but the problem remains that the fate of the societies is wrapped up in the quality of individual managers and their transfers and postings.

#### CO-OPERATIVE FARMING AND THE SECOND FIVE-YEAR PLAN

The Madras Land Revenue Reforms Committee of 1950 has stressed the need for co-operative farming of diverse types not only to bring fresh land under

cultivation but also to augment agricultural production on the existing lands by undertaking intensive cultivation on a joint or a collective basis. Government sanctioned the post of a Deputy Registrar to study the working of co-operative farming societies of different types in Bombay and Uttar Pradesh so that it might be examined whether the methods adopted in those States could be adopted with advantage for the formulation of co-operative farming schemes in the Madras State.

Developmental schemes number III under the Second Five-Year Plan in the Madras State envisages the organisation of farming societies for the landless poor according to a phased programme. The societies will be of the collective farming and tenant farming types. The target in view is that 15 societies will be organised during the Plan period. It is expected that 6,800 acres of land will be brought under cultivation by these societies benefiting 800 members.

The colonists will be given free grants to enable them to subscribe towards the share capital of these societies and free grants and/or loans for purchase of bulls, agricultural implements, seeds, manures, reclamation of lands and sinking of wells. The societies will be provided with departmental staff to look after the day-to-day working. The total cost of the scheme for the entire Plan period is Rs. 17.97 lakhs.

Three collective farming schemes have been submitted to Government and are under consideration—the Manakkarai collective farming scheme in Tirunelveli District, the Bava Oushadeeswaraswamy collective farming scheme in Tanjore and the Ramanaickanpalayam collective farming in Salem District. 318 rural credit societies incorporating better farming objects in their bye-laws are to be formed to help their members by supplying seeds, manures, etc.

#### FUTURE POSSIBILITIES—SUGGESTIONS

Co-operative farming in the strict sense of the term has not seriously been tried in the Madras State. Present pronouncements of the Government indicate that co-operative farms will be set up in community projects, National Extension Service areas and Gramdan villages. Since the advantages of co-operative farming need no reiteration a comprehensive and co-ordinated scheme for a network of co-operative farms is a necessity. It seems that the best course is to adopt co-operative better farming societies for the larger holdings of 10 acres and above. Such holdings can be cultivated economically by the richer landlords owning them and hence co-operation for better methods of cultivation and a few common services will be the best course. This will be conditioned by the fixation of ceiling on holdings.

As regards small holdings below 10 acres co-operative joint farming societies should be encouraged with State help if necessary. Such small holdings predominate in the Madras State and the ideal should be "one village one co-operative joint farming society." This will take care of the basic and the uneconomical holding, confer economies of scale, help mechanisation and lead to marketing in bulk. The greatest hurdle is in the harvesting of the produce and the sharing of the concomitant yield. Dr. Schiller's proposal for individual farming and the

division of functions seems the best remedy for such small fragments which, nevertheless, are looked upon as prized possessions by their owners.

As regards landless labourers, backward classes and *Harijans*, the present policy of co-operative tenant farming societies should be continued and intensified. There are large holdings which cannot be cultivated by the owners singly and such excess lands could be taken on lease and let to small cultivators whatever may be the outcome of the policy of a ceiling on holdings. Such lands need not be handed over from father to son except on the criterion of efficient husbandry properly defined.

Co-operative collective farming are best suited for large areas newly reclaimed by the State. These farms could be cultivated on the basis of work-day units and the labour paid accordingly. The Madras Government is reclaiming large areas with tractors and bull dozers and such lands are ideal for the co-operative experiment. Landless labourers present a problem of re-settlement and rehabilitation and the fourth type of co-operative farming will train them to work in harness as a team and imbue them with the co-operative ideal.

#### *Administrative Details*

A planned attempt to establish co-operative farming on the above basis as the *modus operandi* involves a division of each taluk into units of five villages each. Special assistants could be appointed for each unit and thus 2,000 assistants will give technical advice and guide the societies through their teething troubles. Each village or a group of villages, under this set up can be expected to have three different types of co-operative farming societies. There will be a Co-operative Sub-Registrar for each Taluk and a Deputy Registrar for Co-operative Farming at the district level to co-ordinate the activities of scattered and multitudinous entities. This will involve 2,000 subordinate personnel, 100 to 120 intermediate personnel and 12 superior personnel for the Madras State approximately.

#### CONCLUSION

A socialistic co-operative commonwealth has been proclaimed as the ideal to be aimed at. Morally as well as materially co-operative farming is an objective to be achieved for the advancement of the standard of life of the peasantry. Pilot schemes in a few selected centres can be started and with the experience of their working to serve as a guide the entire length and breadth of the State can be dotted with co-operative farms of all the four types. Apart from doctrinaire and theoretical considerations co-operative farming as a facet of co-operation itself is a cure all for most, if not all the ills of Indian agriculture and is a proof of the ancient maxims "United we stand, divided we fall" and "Union is strength."

## CO-OPERATIVE FARMING—SOME EXPERIMENTS IN INDIA

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In the Second Five-Year Plan it has been laid down to increase agricultural production by 18 per cent and the production of foodgrains by 15 per cent as a whole.<sup>1</sup> Under the revised targets it is envisaged to increase agricultural production by 27 per cent and the production of foodgrains to 24 per cent over the production level of 1955-56. These are broadly sought to be achieved through the programme of major and minor irrigation, fertilizers and manure, improved seeds, land reclamation and land development and general improvements in agricultural practices. To the extent the programme of land reforms, including that of organisation of co-operative farming societies, facilitates this development programme, it is of significance to the execution of the Plan.

The objectives of land reforms as laid down in the Plan are two-fold: "firstly, to remove such impediments to agricultural production as arise from the character of agrarian structure; and secondly, to create conditions for evolving as speedily as possible an agrarian economy with high levels of efficiency and productivity."<sup>2</sup> How far does a programme of developing co-operative farming help achieve these objectives?

Land reform legislations enacted in the country after Independence such as the abolition of intermediaries, tenancy reforms, ceilings on holdings, etc., facilitated the development of activity in co-operative farming by removing some of the weaknesses in the agrarian structure. The settlement of displaced persons and rehabilitation of the less privileged classes were some of the more pressing demands for activity in this field. Some experiments were already set afoot on Bhoodan and Gramdan lands also.

By September, 1956, there were in all 1,560 co-operative farming societies of various types reported in the country. The programme was extensive mainly in Punjab, Bombay and Uttar Pradesh which together reported a total of 905 societies. Statement I in the Appendix indicates the position in detail by States or Union territories. Type-wise, the position was as follows for the country as a whole.

TABLE I—NUMBER OF CO-OPERATIVE FARMING SOCIETIES  
IN INDIA (SEPTEMBER, 1956)

Better Farming	..	..	..	..	105
Tenant Farming	..	..	..	..	312
Joint Farming	..	..	..	..	662
Collective Farming	..	..	..	..	272
Unclassified	..	..	..	..	209
			..	..	
Total	..	..	..	..	1,560
			..	..	

\* Views expressed in this paper are author's personal views and he alone is responsible for expressing them.

1 Government of India, Planning Commission: Second Five-Year Plan, Summary (1956), p. 28.

2 *Ibid.*, p. 70.

In a better farming society, members continue to cultivate their lands individually, the society assisting them in obtaining credit, supplies and marketing and wherever possible practising improved methods of farming and co-operative planning. Tenant farming societies obtain land on free-hold or lease-hold right and parcel out the land among the members in suitable plots so that each member-cultivator has a separate plot to work on, the society assisting him by way of credit, seeds, manures, implements, etc. Each tenant pays a fixed rent to the society. The profits after meeting all expenses and providing for reserve fund are distributed among the tenant-members in proportion to the rent paid by each. In a joint farming society the cultivators, usually small land owners, pool their lands for joint cultivation and management but retain ownership of their individual plots. They receive ownership dividend for their rights in the land, work jointly on the pooled land and receive wages in lieu of operations performed. In a collective farming society, not only the lands are cultivated and managed jointly but the ownership of lands also vests in the society so that no ownership dividend is payable. Ordinarily, these collective societies are formed of landless agriculturists. Thus the degree of co-operation increases as we move from the better farming to the collective co-operative.

Looking purely from the standpoint of administration and management the joint and collectives are the more complex ones. Nevertheless, the highest number of co-operative farming societies was reported under joint farming, these forming 662 out of 1,560 under all types. Of these 662, Punjab reported 345 and Uttar Pradesh 117. Joint farming was the only type in Punjab. It is possible that the consolidation movement in this State has been successful enough to educate the cultivators for pooling their lands. The acquisition of *Bhumidari* rights and special provisions made in the Abolition of Intermediaries Act for co-operative farming societies facilitated cultivators in Uttar Pradesh to organise themselves under the joint farming co-operatives. Of the 272 collective farming societies, Bombay reported 126, Madhya Pradesh 85 and Delhi 10. It appears these societies were formed largely for resettling the displaced persons and/or the backward classes on Government waste lands and under schemes of land colonisation. The largest number, 145 out of 312, of tenant farming societies was reported in Bombay. Tenant farming societies came to be formed as a result of the awakening amongst the tenants as a result of the new rights conferred on them by the tenancy legislation. However, a few of the tenant farming societies in Bombay were formed to evade provisions of the tenancy legislation. But such cases were not many. Noteworthy is a small number of co-operative farming societies in Madras and Andhra—quite in the forefront in Co-operative (credit) Movement—together reporting only 57 societies.

One thing bears out from this discussion that land reforms had significant impact on developing the co-operative farming activity. To some extent this was due to inducements offered by way of subsidies and loans, remissions or concessions in payment of land revenue for a specified period and provision of active assistance by way of making available for inspection and guidance the services of officers both from co-operative and agricultural departments. Preferences were given to co-operative farming societies in the supply of improved seeds, manure and fertilisers as well as in the allotment of government waste lands. Some States shared the cost of management for a specified period. Loans were also

available from co-operative banks on easy terms. In Bombay, for example, initial assistance is given in the form of loans and subsidies on a comprehensive scale for land development, bunding, digging of wells, construction of cattle sheds, godowns, purchase of bullocks and implements, etc. Subsidies are given for the purchase of seeds and manure. Services of a trained agricultural assistant are placed at the disposal of the co-operative farming societies. These societies are inspected by the Co-operative staff. Government waste lands measuring 100 acres and more and situated in compact blocks is reserved for formation of co-operative farming societies, first preference being given to the landless agricultural labourers belonging to the backward classes. The constructive workers who are guiding the movement particularly among the backward and the Adivasi classes have given a fillip to the movement. No wonder the target of organising 44 societies in Gujarat in the First Plan period was over-fulfilled. In Uttar Pradesh, under the Zamindari Abolition Land Reforms Act provisions have been made for consolidation of holdings and co-operative farming. Concession in the form of remission of land revenues, loans and subsidies for construction of small bunds, purchase of agricultural implements have been provided for the co-operative farming societies. The co-operative supervisors give day-to-day guidance and supervision to these societies. In Bihar apart from financial and technical assistance from the Government, the Cane Marketing Union and sugar factories also render such help. As against this, co-operative farming societies suffer from the disability of payment of agricultural income-tax (because of the enlarged unit) in certain States.

It may be interesting to assess the working of the co-operative farming societies on the basis of the results of a few studies. We shall confine our attention to certain preliminary findings of the Survey, "Working of Co-operative Farming Societies in Gujarat" sponsored by the Research Programmes Committee. The Survey was conducted in the year 1955-56. Information was collected for the years 1949-50 to 1955-56. All the 83 societies in Gujarat region were covered for collecting basic information. Of these, 24 were selected for intensive study. Data in this paper relate primarily to the general information for 83 societies.

TABLE II—CO-OPERATIVE FARMING SOCIETIES IN GUJARAT, 1955-56<sup>3</sup>

<i>Type</i>						<i>Total No.</i>
Tenant Farming	..	..	..	..	..	37
Joint Farming	..	..	..	..	..	16
Collective Farming	..	..	..	..	..	30
Total	..	..	..	..	..	83

The total number of societies which was 6 in 1949 increased to 83 within a period of five years. In the year 1950-51 (after the enactment of the Tenancy Act), tenant farming societies increased to 13 from 2 in the previous year.

<sup>3</sup> Better farming societies were excluded.

Of these 83 farming societies, 55 were the backward class societies. Sixty-six per cent of the members from all the 83 societies belonged to the backward classes. Further, amongst the members, 78 per cent were the landless labourers and 12 per cent were persons possessing holdings below 10 acres. Thus these societies really catered to the needs of the less privileged sections of the population.

Of the 83 societies, 46 were formed on Government waste land, 5 on *Khar* land and 16 on river beds or tank beds. Members of these 5 *Khar* land societies (area 13,233 acres) were mostly of non-backward classes. Societies formed on cultivated land were only 15 out of the total 83. The development programme in co-operative farming in Gujarat was, it seems, primarily a rehabilitation (and reclamation) programme. Sixty-six per cent of the land with the co-operatives was given by Government on lease and only 6 per cent of the land was of the members.

Of the 16 joint farming type, 12 were formed on cultivated land and 3 on waste land. One was on *Khar* land. It is significant to note that besides these, 5 joint farming co-operatives were dissolved during these five years (1949-54). Further, dissolution was larger on cultivated land—4 out of 5 joint farming were on cultivated land. Ten of the sixteen joint farming societies at work have taken to individual cultivation within a trial of about five years, the main reasons being that these farming co-operatives could not obtain the expected Government assistance by way of working capital. Other sources of credit were dried up for members as long as they continued cultivation on joint farming. Needless to say that the credit programme should be closely integrated with the development of co-operative farming.

The total membership of these 83 societies is 3,610. The five *Khar* land societies alone have a membership of 1,129. Excluding these, the average membership per society comes to 32.

TABLE III—AVERAGE MEMBERSHIP OF CO-OPERATIVE FARMING SOCIETIES  
GUJARAT, 1955-56

Type	No. of Members (average)
Tenant Farming .. .. .	33
Joint Farming .. .. .	22
Collective Farming .. .. .	35
All Types .. .. .	32

From the standpoint of administration and management of the working, the size was not unwieldy. The joint farming societies had relatively small size—7 of the total 16 had less than 15 members. Membership had been fairly stable and deserters were few.

Looking to the land with the co-operative farming societies, these (excluding 5 *Khar* land societies with an area of 13,233 acres) had, on an average per society, 284 acres of which the area cultivated was 188 acres. The average area cultivated for the tenant farming was 216 acres and for collective farming societies it was 115 acres.

The average cultivated area per member for each type of society was as below :

TABLE IV—AVERAGE AREA CULTIVATED PER MEMBER OF THE SOCIETY, 1954-55

<i>Type</i>				<i>No. of Societies</i>	<i>Area cultivated per member (acres)</i>
Tenant Farming	..	..	..	39	4.3
Joint Farming	..	..	..	16	9.2
Collective Farming	..	..	..	28	2.4
All together	..	..	..	83	4.1

It is interesting to compare the average area cultivated per member of the co-operative farming societies with that per family cultivating land in the same villages but outside these co-operatives. The data relate to 24 societies and 24 villages intensively investigated.

TABLE V

<i>Type</i>				<i>Average cultivated area (acres)</i>	
				<i>Per member of co-operative society</i>	<i>Per cultivator family in the village</i>
Tenant Farming	..	..	..	7.0	6.5
Joint Farming	..	..	..	14.2	6.7
Collective Farming	..	..	..	4.2	4.9

The average unit of cultivation under the joint farming co-operative was about twice that for the cultivating families in the village as a whole.

Average investment per society was Rs. 9,703 and per member Rs. 215. Investment per acre was Rs. 22 only. There was not much difference between average investment per tenant (Rs. 8,034), joint (Rs. 11,646) and collective (Rs. 9,839)

farming societies. Low investment was due to the fact that a predominant number of these was formed on either the *Khar* or waste land, forest land or river bed and tank beds. Average investment for societies formed on cultivated land, for example, was Rs. 39,853 as against Rs. 4,035 on waste land societies. The average output per society (all types together excluding tenant farming) comes to Rs. 14,697. Per cultivated acre the average output was valued at Rs. 82 only. For societies formed on river or tank beds the average output per society was Rs. 5,213 as against Rs. 20,299 for societies on cultivated land. The average output of the co-operative societies for the groups other than the backward classes was somewhat higher than that of the backward classes. The low investment and low output were largely on account of the type of land and the type of membership of these societies.

We have seen that from the type of soil, investment and output the picture given by these societies is not very encouraging. In the management of these societies in conducting their day to day affairs, for example, the assessment and distribution of daily work, it has been observed that members generally feel reluctant to devote their time and energies to this and transfer these either to the chairman or the manager. Generally, it is the chairman who commands the confidence of the members. Managers possessed low educational qualifications and inadequate training. 50 out of 79 societies' managers had received education below matriculation. Only 11 managers had some co-operative training, 5 had agricultural training and 2 had training in accounts. Significant to note is that managers of 57 out of 79 societies were non-members. Salaries paid were very inadequate, 62 out of 82 managers were paid a salary less than Rs. 50 per month. The success of the co-operatives depends largely upon the leaders or managers of these societies who should possess good knowledge of agricultural practices and marketing and understanding of human relations to give cohesion to the groups.

#### CONCLUSIONS

Some broad conclusions emerge from this paper. Land reforms had significant and favourable impact on the development of co-operative farming societies. Of the three types of co-operatives, viz., the tenant farming, the joint farming and the collective farming, the joint farming societies need special attention in their organisation. The problem of credit is closely inter-related with that of the co-operative farming societies and supply of credit should not be a discouraging matter for members joining the joint farming co-operatives. Economic success of these co-operatives depends to a great extent on able management. Managers in the co-operative farming societies in Gujarat had much inadequate education and training. Since the programme of organisation of co-operative farming societies in Gujarat was mainly a programme of rehabilitating the backward and poorer classes on waste lands, *Khar* land, river beds and tank beds, the general efficiency of these societies is bound to be low in the initial stages.

## APPENDIX

## STATEMENT I

TYPES OF CO-OPERATIVE FARMING SOCIETIES IN VARIOUS STATES, SEPTEMBER, 1956

S. No. 1	Name of States or Union Territories 2	Tenant Farming 3	Collective Farming 4	Joint Farming 5	Better Farming 6	Total No. of Societies 7
STATES						
1.	Andhra .. ..	18	9	3	—	30
2.	Assam .. ..	N.A.	N.A.	N.A.	N.A.	105*
3.	Bihar .. ..	—	1	6	—	7
4.	Bombay .. ..	145	126	73	N.A.	344
5.	Jammu and Kashmir ..	N.A.	N.A.	N.A.	N.A.	3*
6.	Kerala .. ..	2	9	35	—	46
7.	Madhya Pradesh ..	31	85	23	—	139
8.	Madras .. ..	26	—	1	—	27
9.	Mysore .. ..	40	19	15	—	74
10.	Orissa .. ..	5	1	12	—	18
11.	Punjab .. ..	—	—	345	—	345
12.	Rajasthan .. ..	N.A.	N.A.	N.A.	N.A.	101*
13.	Uttar Pradesh .. ..	1	3	117	95	216
14.	West Bengal .. ..	37	6	29	—	72
UNION TERRITORIES						
15.	Delhi .. ..	6	10	3	—	19
16.	Himachal Pradesh ..	—	—	—	—	—
17.	Manipur .. ..	—	3	—	—	3
18.	Tripura .. ..	1	—	—	10	11
Total .. ..		312	272	662	105	1,560

\* Only total No. of Co-operative Farming Societies was reported.  
N.A. : Not available.

## A NOTE ON CO-OPERATIVE FARMING SOCIETY

S. V. MYDEO

*Subhash Samudayik Sahakari Shetki Sangh Ltd.*

*Poona*

This note attempts to bring out the salient features of the working of the Subhash Samudayik Sahakari Shetki Sangh Ltd., situated in the Manjari Block, Haveli Taluka, Poona District.

The Sangh is a collective co-operative farming society formed mostly of landless labourers and started working in 1947-48. It has a membership of 70 members of which 37 are working members and 33 are sympathisers. The latter get only dividend on the share capital (which is only 4 per cent). In addition to dividend on share capital, the working members get bonus on the basis of the number of work-days they put in. They also enjoy various amenities such as free quarters, free vegetables for home consumption, primary medical aid and 20 maunds of grain for four members in the family at the wholesale rate.

The society has taken 223 acres of reclaimed land on lease from the Government at the rental of Rs. 44 per annum (excluding the local fund cess which is 0.19 nP. per rupee) per acre. The lease period is upto 1978. The society has purchased 150 acres of land for Rs. 1,30,000. Thus the total area is 373 acres. Out of this land more than 150 acres were cultivable waste which the society has brought under plough during the last seven or eight years.

The society grows all the crops of the tract. Sugarcane (70 acres), vegetables and green fodder are the main money crops.

### *Working Capital*

On 30th June, 1957, the society had a share capital of Rs. 71,990 and a reserve fund of Rs. 23,320. The share capital was increased by ploughing back the bonus and the dividend which the working members had received. This has given stability to the society and helped to secure loans from the Government and the central financing agencies. The following statement gives details of the loan amount received from the Government and the Central Co-operative Bank, Poona and the purpose for which they were utilised.

### *(A) Loans from the Government*

	Rs.
(1) Purchase of tractors .. .. .	3,600
(2) Building godowns .. .. .	1,800
(3) Land development .. .. .	6,000
(4) Purchase of land .. .. .	40,000
(5) Investment on poultry development .. .. .	30,000
(6) Purchase of motor truck .. .. .	30,000
Total .. .. .	1,11,400

*(B) Loans from Central Co-operative Bank, Poona*

(1) As cash credit .. .. .	94,180
(2) As crop loan .. .. .	48,125
Total .. .. .	1,42,305

The society is prompt in repaying the loans with interest. Successful repayment of loans in time has helped the society in getting loans when needed.

*Inventory of Assets*

The society has two tractors, one sugarcane crusher, one 6" pump and 4 oil engines. The society owns 24 bullocks and 6 cows. It has constructed 6 wells so far costing Rs. 14,000 which irrigate about 100 acres of land during the summer season.

*Remuneration for Farm Work*

Members get Rs. 1/8 as daily wages when they work. This rate was prevalent in 1947-48 when the society was registered. The daily wage rate outside is about Re. 1 only. Non-members are paid Re. 1 to Rs. 1/4/-. Young boys of 14 to 16 years who work on the farm are paid Annas 12 per day. Women labourers are paid seven to eight annas for a work-day of 5 hours. 60 to 70 per cent of the women labourers are related to the members.

*Distribution of Profit*

According to bye-laws, nearly 50 per cent of the net profit is distributed as bonus to working members on the basis of work-days they have put in after appropriation under reserve fund (25%), dividend payment (2 to 3½%), bonus to staff at one month's salary (about Rs. 700) and for charitable purposes (20%). The following table gives the distribution of bonus per working day during the last seven years.

<i>Year</i>					<i>Bonus per working day</i>
1950-1951 .. .. .	..	..	...	..	1.62 nP.
1951-1952 .. .. .	..	..	..	..	0.44 „
1952-1953 .. .. .	..	..	..	..	1.15 „
1953-1954 .. .. .	..	..	..	..	2.75 „
1954-1955 .. .. .	..	...	..	..	0.15 „
1955-1956 .. .. .	..	..	..	..	0.19 „
1956-1957 .. .. .	..	..	...	..	0.56 „

Thus during the last seven years, in addition to wages, the members are paid a bonus of 98 nP. for the days they have put in. The average attendance for the last 7 years has been 330 days per year. The expenditure on cultivation and other expenses such as rent, water cess, octroi, management charges, interest, etc., are fairly stable but income varies with the vagaries of nature and due to price fluctuations. This explains the fluctuations in the bonus distributed every year.

### *Management*

The manager is an employee of the society. His work is supervised and directed by the Managing Committee of seven members, which is elected at the annual general meeting. All the plans and programme of work for the season, month or week is chalked out in the weekly meetings of all the working members and daily programme is prepared by the supervisor who is elected at the annual general meeting and given out on the Notice Board previous evening which indicates the minutest details of the work to be done by all concerned. Members usually work for 9-10 hours with a break of one hour for lunch. Often few members have to work over-time even during busy season. During the harvest season, outside labour is engaged either on daily wages or on contract basis. Payment for the hired labour is made either in cash or kind. The society usually enrolls more members if the proportion of hired labour exceeds more than 20 per cent for two successive years.

The society has progressed well during the last nine years. The working of the society on sound lines has been made possible by the generous financial accommodation given by the Government and the Central Co-operative Bank. The progress of co-operative farming societies depends not in a small measure to such financial help. And in the organisation of farming co-operatives, it is no use giving only land to the landless but efforts should simultaneously be made to make adequate finance available. Most of the farming societies are bound to suffer losses in the first few years, even though they may be managed on right lines. These societies are nurtured properly in the early days by giving them adequate finance and experienced and trained men in co-operative farming. Co-operative farming is a way of life and people take time to get adjusted. But once the members acquire the habit of living collectively, the society will and must succeed. There are 4 such collective farming societies round about Poona doing good work. These societies have succeeded because they have good market, transport and irrigation facilities. The correct approach by the District Co-operative Bank, the State Government and sympathisers of the farming co-operatives in providing the necessary finance, guidance and help would go a long way towards their success.