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Preface

The importance of timely evaluation of plan schemes, in the context of planned economic development, hardly needs emphasis. The critical appraisal of development programmes highlighting drawbacks, if any, in the formulation and implementation acts as guidelines for future programmes. The Evaluation Division of the State Planning Board has so far conducted 52 evaluation studies, and published, the reports thereof. These studies pertained to 16 schemes under crop production, 9 under Soil Conservation Programmes, 2 under Minor Irrigation, 2 under Animal Husbandry, 1 under Fisheries Development, 2 under Co-operation, 7 under Rural Development, 1 under Banking, 3 under Industries, 1 under Education, 1 under Housing and 6 under Scheduled Castes and Scheduled Tribes Development. The Division also conducted the evaluation of the Fourth Five Year Plan. The suggestions contained in these reports have helped the concerned Departments considerably in drawing up future programmes.

The main findings and recommendations, contained in the above reports have been assimilated and brought together in this publication, so that it would be of benefit to all those engaged in the formulation and implementation of plan schemes.

These summaries were prepared by Smt. A. Radhamony, Deputy Director and Sri. A.J. Joseph, Assistant Director under the guidance of Sri. John Thomas Chirayath, Chief (Evaluation Division).

Trivandrum
30.11.1987

K.V. Nambiar,
Member Secretary

THE PROGRAMME FOR MULTIPLICATION AND DISTRIBUTION OF IMPROVED SEEDS

Introduction

With the adoption of economic planning, the programme for improved seeds received more attention. The spread of National Extension Programme provided for it the necessary extension base. It was however only during the Third Plan that a Concerted and systematic approach to the multiplication and distribution of improved seeds was laid down and pursued in the state.

Objectives

The objectives of the study were to assess the progress achieved in the multiplication, distribution and extension of improved varieties of paddy seeds, to analyse the problems faced and the hindrances encountered in the implementation of the programme and to crystalize issues and formulate suggestions for effecting improvements in the programme.

Methodology

Information required for it was collected from the Director of Agriculture, research stations supplying nucleus seeds, seed farms producing foundation seeds, registered growers and Block Development Officers in prescribed schedules.

In each district two blocks were selected at random and within each selected block two panchayat wards were selected at random. The final household sample in each ward included a random sample of ten paddy cultivators, a purposive sample of six knowledgeable cultivators and at least one registered grower.

Period of the Survey

The household survey in the selected blocks was conducted in June to July 1967 by trained Investigators. The work was supervised by District Statistical Officers. The data pertaining to research stations, seed farms and activities of the blocks in the distribution programme was collected by the method of mailed questionnaire.

Observations

In order to popularise improved strains of paddy suited to various types of soil and season, an amount of Rs.14 lakhs was provided in the Second Plan which sought to establish 24 seed farms. In this period, however, only 21 farms could be started but the total expenditure incurred in this behalf was higher at Rs.18.98 lakhs. The Third Plan target was 15 new farms and the provision for starting them and continuing the others were Rs.32 lakhs. Against this target ten farms were started but the total expenditure on the scheme soared to Rs.70 lakhs.

About 45 per cent of the farms were growing at least five varieties. The general policy of the department was to limit the number of varieties in a seed farm to two or three. But the farms were not concentrating on a few varieties, according to the soil type and other agronomic conditions. They were also acting as seed trial stations in different regions. 48.7 per cent of the farms had introduced Tainan-3 and 38.7 per cent I.R.8 mainly due to their higher productivity. The other varieties popularised were PTB-22, culture-28 and PTB-9. The introduction of Tainan-3 was meant as a crash programme. This variety had been multiplied in the farms without testing its suitability to the various soil and climatic conditions. Of the farms which introduced this variety only 33 per cent reported that they were testing it in the farms.

The officers of the department generally inspect the seed farms and ensure the purity of the seeds produced. The practices followed in the farms to maintain purity are roguing and conducting operations like threshing, drying, etc., separately for each variety of seed. All the farms reported that they were following these practices strictly. The seeds are tested, before release. Seed farm managers (except three) were trained in the identification of different varieties.

Though the adoption of improved seeds was sought to be encouraged through subsidisation in the First Plan period, concrete steps to ensure multiplication of better seeds were taken only in the Second Plan. Even as substantial allocations were made and significant efforts put in this behalf the availability of improved seeds fell far short of the targets and the area covered by improved seeds found only at quarter of the total area under paddy.

The programme received a new impetus in the Third Plan and vastly increased financial resources were made available for the expansion of seed farms and extended distribution of better seeds. All the same the increase in the quantum of seeds produced and the area covered was by no means commensurate with the resources made available.

Though substantial quantities of new seeds are procured from the research stations in the State and the National Seeds Corporation, the state seed farms bear the principal responsibility for multiplying the foundation seeds, private growers are expected to play an important role in their subsequent propagation. The performance of the seed farms may be evaluated with reference to the following three criteria:

- (a) the expeditious manner in which new varieties are thrown up.
- (b) productivity in the farm.
- (c) profitability of the farm.

It is seen that all the known PTB varieties of improved seeds were taken up for multiplication by the farms as soon as these were made available. Subsequently the other varieties like Tainan-3, IR-8, and Culture-28 were also adopted expeditiously.

The per acre productivity in all the seed farms was found to be very poor. Several reasons have been adduced for it, viz., flood, drought,

disease and inadequate irrigation. Some farms maintain a consistently good record of productivity largely because of the happy choice of land while a considerable number were not able to break through the disadvantages of having to operate on sub-marginal land. The introduction of superior varieties noted for high fertilizer response (going upto 4000 kg. per acre) does not seem to have brought about the spectacular rise in yield associated with the application of better and larger inputs.

The registered growers were assigned an important role in the multiplication as also the distribution of improved seeds. For various reasons they prove unequal to the task of producing and spreading good quality seeds during the period of this study and the system broke down in most districts as the subsidy paid to them was withdrawn. In the two package districts however, few registered growers survive taking advantage of the bound paid and the concession granted in respect of the levy commitments.

The typical small farmer prefers the security of the conventional low yielding seed and is unable and unwilling to take on the manifold risks of high-yielding varieties. Even the medium and large farmers seldom cover their entire holdings by superior seeds. The crucial significance of the better seed in improved agriculture is not yet fully appreciated.

Conclusions

Multiplication of better seeds is to be looked upon as a dynamic process in which new strains are continually replacing the old. Seed farms should strive to achieve a much higher rate of per acre productivity for two reasons. Firstly since these render permanent service they should be self-supporting it not profit-making enterprises and increased productivity in conjunction with operational economics alone can improve the profitability of seed farms. Secondly, it enhances the demonstration effect of seed farms and helps to instil confidence in the minds of cultivators.

It may be necessary to gather as much as 20000 tonnes to ensure complete coverage of the area under paddy. No clear policy seems to have been formulated as to what part of the above quantity is to be produced in the state farms. 25 farms were below the prescribed standard of 25 acres. A few farms were less than 10 acres. The Department of Agriculture is striving towards an expansion of the area to attain viability. The ICAR criterion of a farm of size 25 acres to serve 56000 acres needs to be modified in the context of continued introduction of new varieties and the unsatisfactory trends observed in the production and distribution of grower's seeds. Hence there is a strong case for increasing the output of good seeds substantially through increasing the number and/or size of farms and stepping up per acre productivity.

Flood, drought, disease and inadequate irrigation have been adduced for low productivity. Some farms maintain a consistently good record of productivity. It is felt that a comprehensive enquiry into the organisation and working of the seed farms by a body that combines all the relevant expertise alone will reveal all the gaps and the constraints which hamper the realisation of higher yield. The committee should go into the question of operational efficiency in addition to exploring the methods of raising farm productivity.

The terms of reference may include:

1. Raising the farm size
2. Introduction of multi-cropping
3. Provision of irrigation facilities and better water management and more effective plant protection measures
4. Arrangements for testing the quality of seeds
5. Reorganisation of the managerial staff
6. Suitability of the existing farm land for production of good quality seeds.
7. Maintenance of detailed farm accounts with a view to disclosing the operational diseconomies.

In order to build up the requisite motivation for adoption of better seeds and enhance the demand for the same much greater attention needs to be paid to the following:

a) Such strains alone should be selected whose superiority over the conventional seed is clearly established in respect of not only yield potential but also other characteristics like suitability to the region, pest-resisting capacity, photinsensitivity, and cooking qualities. Only those seeds that have passed unscathed the trials, on a commercial scale, should be pushed through.

b) As the purity and germinability of seeds are of paramount importance, seed cleaning and processing units should be established in important centres.

c) It is now clear that high-yielding strains unaided by complementary inputs will not add materially to paddy-yield. In fact in the absence of such inputs as fertilisers, water and improved implements and due to the lack of suitable cultural practices and adequate attention to details, the output may well be below the yield of traditional strains

The supply of modern inputs therefore needs to be organised far more efficiently. Since an important advantage of most varieties of new seed is their short duration of growth which facilitates multicropping and even relay-cropping the provision of inputs needs to be arranged expeditiously.

d) It is found that new strains bring with them new problems and added risks. Pests and weeds thrive in the new environment of heavy fertilisation and vigorous vegetative growth. Plant protection measures, preventive and curative, assume special significance in this context. Nothing can be more damaging to the propagation of the new seed than acquiescing in the spread of the impression that pests and plant diseases are unavoidable in modern inputs and cultural practices.

e) As the full exploitation of the yield-potential of new seeds calls for extensive use of improved implements arrangements for the supply of the same on easy terms should be pursued more vigorously.

f) In the prevailing circumstances paddy cultivation using modern inputs and new cultural practices inheres far greater risks for various reasons. The technical risks arising from incidence of pests and diseases, drought and flood as also the unfamiliarity with the requirements of modern practices are considerable. Costs of cultivation, more particularly labour costs, are steadily rising probably without a commensurate increase in productivity. At the same time the commercial risks connected with the slump in paddy prices seem to be mounting up. Farm support prices and crop insurance, are the well-known remedies for these risks. While the provision of adequate coverage in respect of both in the present circumstances appears much too ambitious, a beginning may be attempted in selected areas in this regard.

g) The typical small farmer seems to remain outside the mainstream of modernisation, the most important cause of non-involvement being either his unwillingness to take on the new risks or his inability to mobilise readily adequate credit to cover the increased cost of modernisation. Action on the lines suggested by the Rural Credit Review Committee - the formation of the Small Farmers Development Agency and liberalization of credit to small farmers is recommended in this regard.

EXTENT OF ADOPTION OF IMPROVED AGRICULTURAL PRACTICES

1967-68

Introduction

As recommended by the Ministry of agriculture, community development and co-operation two sample surveys were conducted by the Bureau of Economics and Statistics for estimating the area benefitted by improved agricultural practices for the Khariff crops during 1962-63 and 1963-64 respectively in the Community Development Blocks. Further as per the recommendations of the programme Evaluation Organisation two rounds of the survey, one round each of the Khariff and Rabi seasons 1964-65 were again conducted by the State Bureau.

It was considered worthwhile to assess the progress in the adoption of improved agricultural practices. Accordingly the present study was planned, and two rounds of the survey were conducted, one for the Khariff Season and the other for the Rabi Season of 1967-68. This report presents the results of the analysis and interpretation of the data thus collected.

Objectives

The principal aim of the study was to estimate the extent of adoption of improved agricultural practices in terms of both the number of cultivators and acreage benefitted in the Community Development areas in the State. The information was collected separately for the four main crops of Kerala viz. paddy (Virippu, Mundakam & Punja) coconut, arecanut and tapioca. All the other crops were grouped together and studied as a whole. Improved agricultural practices covered by the study comprised the use of:

1. Improved seeds
2. Chemical fertilizers (nitrogenous, phosphatic and potash types)
3. Green manure, oil cake, bone meal and compost manures scientifically prepared.
4. Chemical pesticides for seed treatment and for the standing crop.
5. Improved implements, and
6. Improved cultivation practices.

Methodology.

The design adopted for the survey was that of stratified multi-stage sampling. One block each from the Stage I, Stage II and Post Stage II blocks was selected at random from each district. From these selected blocks, two panchayats were chosen at random and from each panchayat one ward was selected at random. A group of 200 households was selected for listing if the selected ward had more than 200 households.

The households were classified as beneficiaries and non-beneficiaries. The beneficiaries were those cultivators who obtained and/or applied one more of the specified improved agricultural practices during the period

of reference and the non-beneficiaries, those who had not obtained or applied any of these factors.

The beneficiaries and non-beneficiaries in the 200 households were listed separately in ascending order of size of holding. From these lists five beneficiaries and five non-beneficiaries were selected by systematic sampling method for detailed enquiry.

Reference period

The period of the survey was the agricultural year 1967-68. The survey was conducted in two rounds, first covering Virippu crop and the second covering Mundakan and Punja crops.

Main Findings

- 1) Only about one fourth of the cultivators adopted one or more of the improved agricultural practices in 1967-68.
- 2) Adoption of improved agricultural practices was found to be less common among cultivators of perennial crops than among growers of seasonal crops.
- 3) Among paddy cultivators 54 per cent during the first round and 66 per cent during the second round adopted any one or more of the improved practices whereas the corresponding percentage among coconut cultivators was only about 6 per cent during both rounds.
- 4) Nearly 30 per cent of the total cultivated area, i.e., 60 per cent of the area possessed by the beneficiary cultivators benefitted from the adoption of improved agricultural practices during the year 1967-68.
- 5) Among the different crops covered by the survey, paddy benefitted from most improved practices. Improved practices were adopted in two third of the area under paddy.
- 6) For all crops the use of fertilisers was found to be the most widely adopted improved practice.
- 7) The bulk of the cultivators were conversant with the improved agricultural practices covered by the survey, the Community Development Blocks playing an important role in imparting the knowledge. More than 90 per cent of the beneficiary cultivators conversant with the improved practices accept their utility.
- 8) Analytically four different stages may be marked out in the evolution of the adoption of improved practices (i) extension (ii) rendering improved practices economical and attractive (iii) provision of required financial resources and (iv) assuring timely and adequate supplies of inputs. While substantial progress has been achieved in respect of item (i) there seem to be much scope for improvement in respect of all other three stages; the most important of these was lack of finance. This clearly underlines the great need for enhancing the provision of co-operative credit to small farmers.

ANDOORKONAM YELA DEVELOPMENT PROGRAMME

Introduction

The Andoorkonam Yela Programme was considered as a harbinger of the Green Revolution in the community of small farmers in Kerala. It sought to strike a compromise between the realities of the situation and the requirements of change, between the lack of initiative and the paucity of means of the typical ryot on the one hand and the application of cost increased inputs and disciplined efforts on the other.

Objectives

To assess objectively the content and the implementation of the Yela Programme and to identify the areas of success or failure. Special attention was paid to the gaps and constraints in the organisational set up, implementation in detail and also suggest improvements on the working of the project.

Methodology

The study started with the collection of particulars regarding the conception, organisation and operation of the scheme for which purpose the senior officers of the Evaluation Division contacted the principal functionaries of the programme as also the Panchayat Office, the Block Development Office and the local credit co-operative society. For estimating the yield performance in the scheme area, 85 crop-cutting experiments were planned five each from the 17 yela sub committee areas, selected according to simple random sampling method. Out of these, 57 cuts were actually conducted. A socio-economic survey of 100 households was also planned and as many as 86 households were actually canvassed and information gathered. The credit activities of the Andoorkonam Service Co-operative Society were also studied in detail.

Findings

The study of the panchayats 'agricultural economy leads to the definite conclusion that without requisite organisation and adequate material assistance the vast majority of the farmers could not register any progress in their occupation or living standard

While the programme appears to be generally satisfactory in respect of conception and formulation, its implementation leaves much to be desired. It created the right motivation and it generated an appreciable fund of enthusiasm. It also aroused high expectations. But the constraints proved insurmountable.

The approach of the sponsors were pragmatic. Realising in full the magnitude of the problem and conscious of their numerous handicaps, the promoters resisted the temptation to raise their sights too high and set the moderate target of covering only one half of the total paddy area

in the panchayat. Commendable efforts were made to prepare the peasants for an emotional involvement in the common endeavour and to equip them adequately for undertaking the same. In addition to the cultivation of new attitudes, new knowledge and skill were imparted. The sponsors made full use of the ample technical expertise offered generously by Govt. agencies. Organisationally also, the programme made a good start. The formation of 17 Regional Committees as also the Central Committee was rightly conceived, as much as these representative bodies provided the proper machinery for ensuring active participation of the entire farming community. Despite vigorous efforts, the advance towards better farming was tardy. For want of streamlined machinery and sophisticated procedure (there was no formal membership with well defined obligations and rights and there were no systematic records of achievements) it was not easy to measure the progress of the programme.

Since the concept of participation in the programme was none too rigorous, it was not easy to identify any satisfactory criterion of involvement of the farmer in the programme. The farmers of Andoorkonam who are deemed participants in the Yela programme in any conceivable sense were found to operate on fragmented and scattered holdings. This meant the non involvement of a large number of peasants in the Yela area. No concerted drive seems to have been made to persuade the indifferent peasantry to share in the common venture. In view of the pivotal significance of the adoption of improved seeds in better farming and for want of alternatives, participation in the common nursery has been considered the hallmark of the Yela programme. It was found that hardly one fourth of the operating holdings in the selected 450 acre region properly came under the Yela programme. This was particularly disconcerting since the selected seed was the crux of improved paddy cultivation. The new cultural practices and superior inputs hardly make any impact on the inferior indigenous strains. Despite the limited coverage, those who shared the common nursery derived substantial benefits from it and the scheme itself was operated economically and efficiently. The progress achieved in respect of tractor ploughing was meagre. It was found that not more than 40 per cent of the farmers and 32 per cent of the area cultivated in the programme alone were served by the tractor.

In the context of fertilizer responsive seeds, water management assumes added significance. The experience of the Andoorkonam yela indicate that the current organisation and procedure for maintenance of minor irrigation projects were far too inadequate.

Improved agricultural practices are generally capital intensive, the need for working capital being particularly acute. The Andoorkonam Yela Organisation suffered from a double disadvantage in this regard. They had looked forward to Govt. for special credit assistance of a high order. Not only their expectations were belied but also the local co-operative credit society was found not in a position to extend even the routine accommodation.

Suggestions

The Yela Programme should be so designed as to take full account of the unique characteristics of the Kerala farmer. The Andoorkonam peasant could not take material advantage of any of the agencies sponsored

by Govt. nor has he benefited significantly from the spread effect and the linkage effect of the general economic development in the State. Hence a special programme involving a concerted and purposive attempt like Yela programme constitute a real historical necessity.

The attention bestowed on the use of fertilizers and p.p. materials was the key factor in the success of the FACT project. It should be the primary obligation of the Yela committee not only to streamline the agency for the procurement and distribution of adequate quantities of these vital inputs but also to ensure that every participant farmer in the programme use them in the desired manner. The very small farmer benefit of resources and devoid of the incentive may choose to follow the line of least resistance and continue to be apathetic to the use of modern inputs. Those Yela Committees which show sufficient earnestness, initiative and self-reliance may be helped with long-term loan and subsidies and procedures thereof revised to cut out delay. Unless the agricultural credit co-operative society functioning in the region collaborates with the Yela organisation and reorient its lending policy to its objectives the Yela programme shall never be implemented efficiently.

The Andoorkonan Yela Programme neglected several important steps necessary for raising the per acre aproductivity thereby ensuring a reasonable return from farming. Adoption of improved implements, development of indigenous manurial resources, better arrangement for harvesting, threshing and storage and more efficient marketing of the agricultural produce need be given much greater importance in any scheme of modernisation of farming.

SOIL CONSERVATION PROGRAMMES IN KERALA

Introduction

Soil constitutes the physical basis of agriculture. It is the progenitor of food, fibre and also the raw material for many industries. The crucial importance of soil renders its protection and conservation essential. Planned soil conservation programmes were initiated in India during the First Five Year Plan period and the Central Soil Conservation Board was set up in 1953. The National Policy on Soil Conservation Board was set up in 1953. The National Policy on Soil Conservation was defined in the First Plan as the optimum use of land resources on a sustained basis in the interest of present and future generations.

Evaluation of soil conservation schemes was made a continuing scheme during the Fourth Five Year Plan period. The present study was sanctioned by Government as another round of evaluation of soil conservation programmes in the State during 1968-69. Distinctive feature of this round is the attempt made to throw morlight on the impact of the programme on productivity of land by comparison with control plots.

Objectives

The objectives of the study were the assessment of the impact of soil conservation schemes on agricultural land in respect of cropping pattern and the effect of contour bunding particularly in relation to productivity. Further, an assessment of benefits accrued in relation to cost incurred was attempted using the concept of the control plot. An attempt was made to identify the areas of failure, if any, to bring out the constraints which have held up the progress of the programme and to offer concrete suggestions.

Methodology

The study was conducted in nine districts by selecting on scheme in each district for detailed analysis. From each scheme thus selected, 12 farmers from the list of beneficiaries were selected at random so that three farmers fall within each of the following strata according to the size of their holdings, (i) less than 2 acres, (ii) 2 - 5 acres, (iii) 5 - 10 acres and (iv) 10 acres and above.

An equal number of control plots of the same soil type, topography, crop pattern, etc., were selected near the scheme area. The selected beneficiary plots and the corresponding control plots were regularly contacted every fortnight and details of crops raised, cultural practices adopted, cost incurred, income derived, etc., were collected by trained investigators of the Bureau of Economics & Statistics.

Period of the Survey

It was one year from September 1968 to August 1969.

Main Findings

From a comparison of the trends in the scheme area and the control area it was found that soil conservation measures help to bring under fresh cultivation a significant part of cultivable waste. Similarly though no substantial change was effected in the crop pattern, conservation measures led to a significant increase in the cultivation of perennial crops.

Areca nut proved to be the most popular crop in the new preferred planting followed by coconut, rubber and pepper in the descending order.

The per hectare yield was found to be lower in the scheme area for most perennial crops but higher in the case of all seasonal crops. This was obviously because the scheme area had a larger proportion of new planting which will yield fully in due course. The average yield per tree however was significantly higher in the scheme area which was a clear indication of the beneficial nature of soil conservation measures.

It was not easy to apply the cost-analysis to soil conservation programmes.

The intangible benefits of soil conservation are by no means negligible. Further, not all tangible benefits are quantifiable. Even in respect of quantifiable benefits it was often difficult to impute the increase in income or productivity specifically to the measure of conservation. All the same, the following generalisation may reasonably be made on the basis of the data collected in this study.

- (a) The extension of soil conservation measures to the entire erodible area in the State will facilitate pushing up cultivation to not less than 40,000 ha.
- (b) The gross money income per hectare rose by 68 per cent in a four year period beginning with 1965-66 in the scheme area - the increase in gross real income was about 29 per cent.
- (c) The expenditure on soil conservation schemes was found to be not only protective but also productive. In the fourth year after the completion of the programme the average annual yield may be taken as higher by 28 per cent.

No significant diversification of cropping pattern had taken place in the scheme area not any new crop introduced. These indicate the lack of follow-up work and the absence of any attempt to popularise agronomic practices ancillary to the adoption of conservation measures.

There was no arrangement to watch the condition of the bunds after these were constructed. Nearly 40 per cent of the beneficiaries complained of breaches in bunds and a good many of these were still in various stages of disrepair.

Suggestions

Though the problem areas in the State of Kerala have yet to be surveyed properly the tentative estimate is that about 10 lakh hectares need conservation measures. This may be considered as a guideline for action.

Taking into account the indigence of the bulk of the beneficiaries and the dominant system of subsistence farming the case for a more generous loan-cum-subsidy policy needs to be examined. Soil conservation should be looked upon as a social endeavour to protect and preserve a national asset. As such it is in the interest of the State to induce every affected person to participate in this supremely important enterprise. Would it be feasible to raise the subsidy component from 25 to 50 per cent in respect of small farmers?

In the alternative the period of grace may be raised to five years in respect of repayment of the loan as it is found that the conservation measures take at least five years to produce their full impact on land productivity. In order to expedite the collection of dues and to facilitate repayment of loan it may be desirable to post an assistant in each district to function as liaison between the District Soil Conservation Officer and the beneficiaries in the district. As many of the bunds were in disrepair, the technical complement of the District Office needs to be strengthened so that competent personnel will be able to inspect the bunds periodically and help to keep them in good repair.

Soil conservation activities in Kerala for various reason centre on engineering devices, primarily contour bunding. It is well known that unless appropriate agronomic practices such as crop rotation, contour cultivation, strip cropping and cover cropping are adopted in conjunction with bund construction these engineering devices will not ensure full soil protection and promote maximum soil capability. At present this aspect appears to be totally neglected. Here again there is a clear need to strengthen the conservation machinery at the district level.

In several scheme areas dearth of irrigation facilities and lack of proper water management appear to impair the efficacy of conservation treatment. This suggests the desirability of better link up of soil conservation measures and water management.

MINOR IRRIGATION WORKS IN KERALA

Introduction

Minor irrigation works were given great importance in the planned development of agricultural infrastructure. During the Third Plan period, the estimated expenditure on minor irrigation at Rs. 269 crores exceeded the target of Rs. 177 crores and benefited 13.10 million acres. The Fourth Plan targets were Rs. 520 crores and 17 million acres respectively.

Objectives

The present study was of a Pilot nature taken up during 1967-68 in order to facilitate a more comprehensive enquiry with the following objectives.

- a) Collection of data on irrigation potential created both in private and public sectors.
- b) Verification by spot inspection of sample of works functioning, the rate of utilisation of irrigation potential created, crops benefited, cost incurred and benefits derived.
- c) Estimation of area irrigated by each type of work.
- d) Assessment of the progress in the utilisation of loans and other aids given for creating minor irrigation potential.

Methodology

Two blocks each from the categories, Stage - I, Stage - II and post Stage - II block were selected at random from each of the nine districts. From each selected block a list of public minor irrigation works constructed using funds provided by the Blocks and other Governmental agencies during the period 1961-62 to 1966-67 was prepared. A list of private minor irrigation works constructed or improved during the period with the aid from government and given pumpsets etc. was also prepared. All the public and private works so listed were classified as wells, tanks, diversion schemes, lift irrigation, tube-wells and others. Two works in each type in private as well as public works were selected at random in each block. For each work so selected, a list of cultivators benefited by the work and survey sub-numbers and area in the command area of the work was prepared. In the case of public minor irrigation works, this was done with the aid of the project file and the junior engineer or assistant engineer-in-charge. A systematic sample of 10 per cent of the cultivators in the command area of each public minor irrigation work was selected after arranging the names of the cultivators in alphabetical order. In respect of private minor irrigation works, all beneficiary cultivators of selected works were contacted.

Observations

The progress of the major and medium projects in Kerala was so tardy during the Third Plan. Minor Irrigation projects, on the other hand, can be quickly executed because of the comparative ease with which they can be identified and appraised.

The general considerations in conjunction with the specific findings of the present study constitute the rationale of the steadily growing outlay on minor irrigation schemes in Kerala. Apart from stabilising agriculture in areas that were exposed to the twin hazards of drought and flood, the minor irrigation works were found to call significant chunks of arable land into cultivation and increase the yield-potential of land already under the plough. Further these facilitate the adoption of superior inputs and improved cultural practices and induce the sophistication of a more rewarding crop-mix.

The present study brings out clearly that for a capital outlay below Rs. 300 per acre the addition to paddy yield realised per year is under no circumstances less than a third of this amount. We need a more intensive investigation to assess the varied nature and extent of the benefits indicated above.

With a topography and hydrology that are eminently favourable it is estimated that adequate extension of irrigation facilities will rise, output in Kerala to 27 lakh tonnes and thus solve the food problem for ever. It follows that the outlay on minor irrigation needs to be raised substantially and the pace of execution quickened considerably. Maintenance and renovation are no less important than new construction. The survey of selected works leads to the inference that there is a significant gap between Ayacut area, the irrigable area and the irrigated area. The general presumption is that unlike in the major irrigation works the potential created in minor works is fully used up. The complaint is wide-spread however that not only the ayacut area is exaggerated but also even the facilities created are not properly conserved and utilised. One can hardly escape the impression that more follow-up action by technically competent persons is called for.

Increasing stress is now being laid on the inter-relationship of inputs in the process of modernisation in agriculture. This necessitates the integrated development of the infrastructure. Irrigation works have to be planned and further linked up with other components. It is hoped that small farmers development agency, the latest addition to the organisational experiments, will incorporate minor irrigation schemes in their development plans so as to achieve the degree of integration indicated above.

COST OF CULTIVATION OF PADDY An Analytical Tool for Evaluation

Introduction

The study was conducted to investigate the impact of the intensive agricultural districts programme on the agricultural economy of Kerala. During this investigation it was found that the utter lack of cost estimates relating to paddy cultivation rendered quantification of impact effect inexact and undependable. Enquiries directed to peasants, the bulk of whom seldom kept accounts and had no clear notion of costs were bound to be inaccurate. Rough and ready estimates of per acre cost furnished varies from Rs. 200 to Rs.900. The concept of cost is much too loose and it takes on varied hues, it lacks the rigour and consistency that are essential for a rational computation.

Cost data have other uses besides being an aid to the formulation of Price Policy. Agricultural extension work and provision of adequate incentives to farmers have assumed great significance in recent times and these call for some understanding of the trends in production costs of principal crops. Modernisation in agriculture involves the substitution of biological inputs by chemical inputs and the replacement of human and animal power by mechanical powers. It implies the build-up costly infrastructure also. The impact can be appraised properly only with the aid of some cost estimates. The exercise recorded in the report has been improvised as an imperfect substitute for the same.

Scope

The scope is highly restricted. It is confined to one crop viz., paddy and the coverage is limited to the four districts out of the ten districts of the State - the two package districts Palakkad and Alleppey, one IAAP district, Trissur and one control region, Kollam district. These four districts were taken up for the IAAP enquiry. The household schedules relating to this study were canvassed along with the field survey in respect of IADP. We are inclined to consider this exercise more as a path finder than a comprehensive endeavour to assess cultivation costs.

Methodology

Ten blocks were selected at random and in each of the above four districts and two panchayat wards were also selected at random from each of the blocks. For the IADP study as many as 150 households were selected in these wards and for the study of cost of cultivation of paddy five households were selected from among these households possessing wet lands. Details of autumn, winter and summer crops and local and high yielding varieties cultivated in the fields of selected sample households were collected separately for assessing the variations in cost according to season and variety of seeds used. Simplistic method is used in observing the cultural practices of a few representative farmers who adopted specified improved practices with a view to ascertaining their model cultivation costs. For this, three CD blocks were selected from the 10 blocks in each district purposively on the basis of agronomic and geographical factors.

The period of the survey was 1969-70.

Observations

High yielding varieties are known to involve significantly higher costs of cultivation and this is perhaps the strongest deterrent to more extensive adoption of the same. For the autumn crop 1968, it was estimated that the average per acre costs for high yielding varieties rose to Rs. 511 against the modest figure of Rs. 221 for local varieties. In the present enquiry the cost estimates for HYV are seen to vary from Rs. 586 (Palakkad, summer crops, size group 1.0-2.5 acres) to Rs. 944 (Alappuzha summer crop, 5.0-10.0). Barring these limiting cases, however, the difference in costs between local and HYV is found to be of a smaller magnitude than what is registered in the PEO study quoted above. The increment to per acre cost on account of the switchover to HYV when we consider the average for all size groups, the principal seasons and the four districts is only 31% as against more than 130% recorded in the PEO study. For autumn crop the average per acre cost touches the lowest figure in Trissur at Rs. 522, it rises by about 26% in both Kollam and Palakkad, Allappuzha district alone has a significantly higher cost figure for the summer crop Rs. 851, which is higher by 55%. Seasonal variations are found not very significant in respect of HYV costs.

The main explanation for the smaller spread between the costs of local varieties and HYV is to be sought in the cultural practices prevalent among the sample households canvassed in this study, the major section of such cultivators do not seem to follow up the full implications of adoption of superior seeds. The use of fertilizer responsive seeds implied substantially enhanced expenditure on fertilisers, pesticides, irrigation etc. Not many of the adopters of HYV canvassed in this study purchased the modern requisites in full or used modern practices in the promotional manner.

In subsistence farming which is characteristic of small holdings, there are fewer chances of purchased inputs and hired labour being used than are available to the large holder. The spread is highest at 36% in Kollam district (holding size 0.0-1.0) and then it diminishes steadily to 28 in the next higher group and further to 26 in the group 2.5 - 5.0. In Allappuzha district a similar downward movement starts from 36% to 28%, 25%, 24% until it falls to 19% for the highest size group in respect of the dominant summer crop. In Trissur and Palakkad districts the movement is erratic, and this is probably due to the extensive practice of using leased in land for paddy cultivation in these districts. Imputation of rent consequently becomes necessary in a smaller area of the holdings in these districts.

The cost of hired and household labour between 25% and 50% in the total cost. In most of the sample households surveyed this proportion ranges from 25 to 45%.

From the analysis of the cost data collected, it is seen that the average cost per quintal varies from Rs. 67 (summer crop, Kollam district) in respect of indigenous varieties. Differences in unit costs are generally attributed to variations in cultural practices, inherent soil fertility and the responsiveness of the holding to the assortment of inputs employed. It is interesting to observe that in 8 out of the 12 instances examined, the cost per quintal clusters round to Rs. 72. With the introduction of high yielding varieties the concept of unit cost has gathered a new dimension. While the unit cost is definitely lower for HYV in all the 12 instances the extent of the economy achieved is found to vary significantly from about 21/2% to over 40% of the cost of local varieties. In more than one half the sample studied the adoption of HYV is seen to lead to the significant cut in the unit cost of production by 25% and more. Even local strain of paddy yield not less than 870 kg/acre in 8 out of the 12 instances recorded while the average productivity of HYV exceeds 1095 kg/acre in all but two cases.

Paddy prices no doubt register a high degree of volatility and hence the measure of profitability indicated above may easily be affected by downward fluctuation in farm prices. But then the prices taken into account in this study refer to the year 1969-70 when farm prices had fallen substantially from the previous two years.

While the increase in income has been larger than rise in production costs in all districts and for all seasons the concerned farmers have enjoyed widely varying fortunes. In more than half the instances the increase in revenue has been more than double the increment to cultivation cost.

It is found that the input/output ratio varies from 0.57 (Allappuzha district, HYV, summer crop) to 0.95 (Palakkad district, summer crop, local variety).

In the Yela programme conducted by the FACT in Ardoorkonam, tractorisation is seen to have cut the cost per acre from Rs. 126 to Rs. 42. The field enquiry for this study throws out figures which indicate a much lower degree of saving of labour cost. Further even with the adoption of tractor the use of substantial quantum of human and animal labour appears to be inevitable.

EVALUATION OF SOIL CONSERVATION WORK

IN ATTUMUTTATHU THEKKEMATHE KAYAL AREA - A CASE STUDY

Introduction

Soil Conservation Programme were initiated in Kerala state - during the First Five Year Plan period when a nominal sum of Rs. 1.77 lakhs was spent on this account. The expenditure incurred rose to Rs. 17.47 lakhs in the Second Plan period and further went upto rs. 112.07 lakhs in the Third Plan period. The total expenditure for the last 18 years including the three Annual Plans period viz., 1966 to 1969 adds to the sizeable amount of Rs. 328.27 lskhd. The bulk of this was spent on the construction of contour bunds on hilly agricultural lands.

The report embodies the evaluation studies (undertaken by the Evaluation Division of the State Planning Board) bearing on a particular soil conservation scheme implemented in Attumuttu Thekkemathe Kayal in Kuttanad during 1967-68. This is a case study which is undertaken with a view to assessing the usefulness and limitations in the working of the scheme. An attempt has been made to assess the extent to which the objectives of the scheme have been fulfilled and as certain the reasons for the shortfall if any.

Methodology

The special feature of the scheme investigated here is that the land is held exclusively by one beneficiary. This beneficiary was contacted several times and an on-the-spot study of the holding made first when the most part of it was submerged under water and when paddy cultivation was started.

Period of the survey

The survey was started in 1970 and completed in June 1971.

Objectives

The prime purpose of the scheme was to construct strong bunds around the Thekkematti kayal so as to prevent damages to the crop by breach and ensure a timely and safe cultivation in the 32 hectare field. The reclamation of lands from the kayal or fresh water lakes involves two costly operations namely bunding and draining. It is necessary for the cultivators to construct the temporary bunds every year for reclaiming the land for cultivation. The kayal reclamation in Kuttanad is thus the result of the untiring and persistent efforts of enterprising cultivators.

Findings

Floods in Kuttanad are an annual feature during the monsoons though their intensity varies from year to year. Tribal action from the Arabian sea combined with the flood water of the rivers causes frequent breaches with all their disastrous consequences.

Paddy cultivation has become more stabilised and the element of uncertainty reduced considerably. A firm basis thus been laid down for commercial farming. The bunds which have contributed to the stabilisation have not only become a protective belt to the reclaimed area but also a breeding ground of perennial trees. The irrigation department is entrusted with execution of the work, even though the overall charge of the scheme is vested with the Department of Soil Conservation. Avoidable delay that occurred in the initial stages of the work in the scheme is attributed to the above dual control. It would be necessary to correct this imbalance and extend the scope of scheme on Kayal reclamation. No follow-up action has been taken by the concerned authorities since the completion of the work. The beneficiary cultivator is thus left to find for himself to keep the bunds intact, without any technical financial aids from the authorities concerned. In the same manner, the cultivator does not seem to have been assisted adequately to adopt suitable agronomic practices to reap the maximum benefit from the scheme area.

The reclaimed Kayal lands provided with permanent bunds are bound to attain substantially higher level of productivity in the near future.

Suggestions

The programme will produce its full impact only after a gestation period of about ten years. In view of the immense potentialities of the scheme under study it would only be proper to suggest that such projects aiming at the improvement of other canal reclaimed lands belonging to the less affluent and influential cultivators of Kuttanad need every encouragement.

The task stabilising the existing bunds and construction of permanent bunds wherever necessary proves too onerous and for individual holdings uneconomical.

The single crop land can be converted into double crop land or even to triple crop land if the whole 'Mathi Kayal area' comprising nearly 1400 acres is provided with ring bunds of permanent nature as has been done in the case of neighbouring 'R-block'.

**BENCH-MARK SURVEY REPORT ON SELECTED SCHEME AREAS
(Soil Conservation)**

Introduction

With the advent of five year plans much emphasis was laid on soil conservation programmes. It has been designed with the object of satisfying the basic need of a progressive farming system necessary to create a productive base of land on which a super structure of a sound agricultural programme can be built up. More than fifty schemes have been launched in the State during the past 18 years entailing a total expenditure of about Rs.328 lakhs.

The Bureau of Economics and Statistics and subsequently the State Planning Board undertook evaluation studies on some of the schemes carried out so far. One of the limitations of these studies relates to the lack of relevant data of the scheme area before the implementation of the scheme. On the eve of the execution of works, it is often difficult to attempt the cost-benefit analysis in all its aspects. To get over this difficulty, the Planning Board undertook a Bench-Mark Survey on a pilot basis during 1970-71 in the nine selected scheme areas spread over all the former nine districts where the work was either just started or about to commence.

Period of Survey : 1970-71

Methodology

Nine scheme areas were selected, one each in every district from the list of schemes proposed to be taken up for soil conservation work by the Department of Soil Conservation in 1969-70. In each scheme 30 cultivators were selected in proportion to their number coming under the various size groups.

The staff employed for the field enquiry connected with the survey comprised of one Investigator in each district. The District Statistical Officer was in charge of the immediate supervision and guidance of the survey at the district level. Processing of the data was undertaken by the staff at the Headquarters office of the Planning Board. Relevant information was collected from concerned District Soil Conservation Officers and other sources.

The nine scheme areas covered by the Survey are located in the hilly cultivated areas of the State. They are Anicad in Alleppey, Kudappally in Cannanore, Piravom in Ernakulam, Mannam in Kottayam, Thalayad in Kozhikode, Kandamangalam in Palghat, Ezhankulam in Ouilon, Pallikapuram in Trichur and Vithura in Trivandrum district.

Findings

The entire area covered by the Anicad scheme had little irrigation

facilities. 71% of the total area came under perennial crops while 22% was under seasonal crops. Nearly 60% of the sale proceeds of crops was obtained from rubber. The average value of land worked out to be Rs.5783 during 1968-69. An area of 28 ha. had already been treated for erosion. Contour bunds with rubble were constructed in 26.54 hectares by the owners of the selected plots.

Out of the total area of 103.75 ha. by the selected households only 1.21 ha. were irrigated in Kudappally scheme. 69% of the area is covered by perennial crops. Nearly 43% of the total sale proceeds was derived from rubber. The average value of land per ha. worked out to Rs.5602. 60% of the selected plots were partly affected and 23% fully affected by soil erosion. The extent of area not cultivated due to soil erosion exceeded 4 ha. One third of the selected cultivators did not adopt soil conservation measures due to lack of finance and a similar section failed to do so since they did not consider it as a profitable investment.

Only 60% of the cultivated area of Piravom scheme was irrigated while wells provide the irrigation water for two third of the land and the rest is served by canals. Perennial crops occupied more than 28% of the total area and tapioca cultivation in more than two third of the area. 42% of the value of produce was derived from tapioca and 44% of the total value of produce sold was on account of rubber.

The average market value of land in respect of the selected plots was reported as Rs.23210 per ha. The soil type in the area had red loam, laterite and gravelly soil. The scheme was implemented in Piravom village as no soil conservation work was carried out before and the hazards of soil erosion were found very grave.

The scheme area in Kottayam district (Mannam) depends exclusively on rain, 88% was covered by perennial crops and 21% of the total number of trees were non-bearing. Rubber and coconut are seen to be the principal crops respectively in 48% and 19% of the total area. 39% of the sale proceeds of crops was derived from rubber. The average value of land works out to Rs.7747 per ha. 69% of the sample were reported to be partly affected by soil erosion. Although some of the cultivators had adopted soil conservation measures prior to the implementation of the scheme, shortage of funds in most cases held up the execution of soil conservation measures.

The entire area of Thalayed scheme in Kozhikode district were unirrigated 84% of the total area came under perennial crops and 6% under seasonal crops. 81% of the area in the selected plots were under pepper and 92% of the sale proceeds was derived from it. The average value of the land in the sample during 1968-69 worked out to Rs.12,227 per ha. The soil type was gravelly and red loam.

90% of the household were fully affected by soil erosion and the area came to 41.17 hectares. Soil conservation measures were not adopted in the sample by the land owners mainly due to paucity of funds.

Kandamangalam scheme area in Palghat district is largely under rubber plantation depending on rainfed water. The soil type is laterite. The selected area is an Estate belonging to seven families who are residing at Palghat and Ottapalam. Required details could not be collected from them because

of their non-response.

Ezhamkulam scheme area in Quilon district is largely under rubber plantation depending on rainfed water. Nearly 56% of the total area was covered by perennial crops and 32% by seasonal crops during the reference period. Paddy accounted for nearly 36% of the total crop yield. The area selected was without any irrigation facilities at the time of the survey.

About 34% and 28% of the total sale proceeds of crops were obtained from Rubber and Paddy respectively. The average value of land per ha. was Rs.15,649.00 during the reference year. More than half of the selected holdings were either affected partly or fully by the soil erosion hazards. The main reason for not taking up soil conservation measures in the selected area was reported to be lack of finance.

Pallikappuram scheme area in Trichur district had some irrigation facilities in less than half of the cultivated area. Paddy, tapioca, cashewnut were the main crops raised in the selected sample. Tapioca accounted for 59% of the total value of crops obtained during 1968-69 and 61% of the total value was derived from it. The average value of the land per hectare comes to Rs.3954 in the selected area. 10% of the plots were fully affected by soil erosion while 90% partly affected 25 ha. of land were already covered by soil conservation measures out of which 12 ha. are made up of mud. 75% of the cultivators reported their inability to execute the measures due to lack of finance.

Ozhamalackal scheme area in Trivandrum district was unirrigated. 37% of the area came under perennial crops and 54% under seasonal crops. Tapioca accounts for 70% of the cultivated area and 34% of the sale proceeds was derived from it. The average value of land per hectare was Rs.15,031.00 in the scheme area.

About 53% of the area was affected by soil erosion. All the selected cultivators except one has not undertaken any soil conservation measures in their plots due to paucity of funds.

REPORT ON INTENSIVE AGRICULTURAL DISTRICT PROGRAMME IN KERALA

Introduction

The programme was designed to develop the whole farm community by carrying out a programme that would speed up agricultural production and benefit all farmers, small and large. In view of the various potentialities of IADP as a pace-setter and path-finder against the background of this chronically food deficit state, the Evaluation Division of the State Planning Board initiated a detailed study in 1969. Its approach, methodology, objectives and procedure differs markedly from those of earlier studies undertaken in this field. Two special features of this investigation may be mentioned. (1) Study of two control district viz. Trichur (IADP) and Quilon and (2) A household survey covering of the two package districts and two control districts.

Objectives

The study had the following objectives.

- i. To examine the nature and adequacy of the aims of IADP.
- ii. To assess the progress towards the achievement of targets.
- iii. To ascertain whether there is any substantial difference in the paces of agricultural development between the IADP and control districts.
- iv. To examine the efficacy of IADP as an agency to promote the "green revolution", and
- v. To identify the areas of success and failure and to suggest corrective and remedial measures.

Methodology

A multi-stage sampling was adopted for the conduct of the survey in all the four districts. From each of the four selected district viz. Alleppey, Palghat, (package districts) Trichur (IADP) and Quilon, ten C.D.Blocks were selected at random. In each of the selected C.D. Blocks, two wards were selected and from each selected ward 30 agricultural households were selected for the purpose of the survey. The field work was started in the middle of 1969 and completed towards the close of the year. A detailed progress report was also obtained from all the C.D. Blocks. All the concerned officers of the Departments of Agriculture and Co-operation at the State and district levels were contacted and the relevant issues discussed with

them in detail.

Findings

The results of the household survey conducted indicate substantially lower level of achievements. No time bound targets seem to have been fixed in the quantum of extension work carried on by the Village Level Workers nor any rigorous arrangements for an effective supervision by the Block level and District level officers.

One significant feature of the pattern of fertilizer use calls for special comment. It is not extensively adopted in respect of crops other than paddy. Plant protection measures especially the use of pesticides assume great importance in the context of the introduction of high yielding varieties. The increased cost of chemicals and the rise in wages of associated labour dampen the enthusiasm of peasants.

In Alleppey district the dominant problem has been stabilisation of agriculture through better flood control measures and prevention of salinity intrusion. Though the IADP was not specially involved in it, a number of measures have been taken up in this regard. The proportion of irrigated area in Palghat district considerably rose to one-fifth of the total by 1968-69, dearth of irrigation facilities continue to block the adoption of higher agricultural technology.

Palghat district has registered remarkable progress in the use of tractors, half of the total number used in Kerala is found to operate in this district. Though Alleppey district played the pioneering role in the introduction of tractors its spread was seriously retarded by the militant opposition of labour in the district. At present every block in the package district maintains one tractor each to be hired out to the needy farmers which is found insufficient to meet the growing demand. No concerted measures seem to have been taken to propagate the use of other mechanical contrivances and improved implements such as seed drills, noes, haarrrows, levellers, threshing and winnowing machines and reapers, a few of these like the threshing machine was pushed up during the Tinan-3 campaign but was retired from extensive use subsequently. An Engineering Workshop was opened in both the package districts for repair and servicing of departmental tractors and other agricultural implements. The Agro Industries Corporation has opened recently one service station each in the two package districts. There are as yet no satisfactory arrangements to cater to the requirements of the farming community. It may be noted that the provision of repair and servicing facilities is indispensable for effective propagation of new and unfamiliar implements.

Since IADP is essentially a production oriented programme with particular emphasis on cereal crops viz., paddy it is but natural that concentrated efforts were made to step up the production of paddy in the two Package districts in Kerala. However during the nine year period ending 1969-70 while production of paddy increased only by 27% in Palghat and 15% in Alleppey it rose by 41% in Trichur, though it stagnated in Quilon district. The marginal increase in total production in the IADP areas is the resultant of a combination of area effect and yield effect. Areas of

the package districts had special potentialities (viz., Palghat taluk of Palghat district and Kuttanad taluk of Alleppey district) had registered an increase of 50% and 100% respectively in the remarkable progress with an increase of production of rice by 41%. Oulon district could keep up a reasonable level of growth because of the increased output of tapioca.

The introduction of short duration varieties and the advance of agronomic practices have invested multi-cropping with a new significance. Further, multi-cropping appears to be the most effective method of raising employment in agricultural sector. Concerted attempts to promote multi-cropping were made in Palghat district only recently with the launching of the programme in Pothundy ayacut area. In Alleppey district the success of the attempts was marred by natural hazards.

Cropping

The coverage of the programme was extended to include a few other crops, but the promotional efforts in respect of these crops lacked the pace and the tempo witnessed in the case of paddy. IADP has continued to be more or less an isolated programme and has not gathered the dynamism envisaged in Stage II. It is found to have produced a direct impact only on a limited section of the farming community.

Suggestions

In the absence of a suitably built up production plan it has not been possible to translate the essence of the package concept into action, the form and the structure of it perhaps may have to be changed, by the Block level and District level officers. At any rate the maintenance of records relating to these activities leaves much to be desired. The importance of agricultural research for a State like Kerala which is on the threshold of the green revolution can hardly be exaggerated. While it is easy enough to borrow the fruits of basic research conducted elsewhere, adaptive research which seeks to obtain answers to local problems and to bridge the gap between research, extension and the farmer is something we have to nurture and develop within the districts.

There is considerable scope left for creating and sustaining the demand for good seeds as also for meeting the enhanced demand expeditiously. It cannot be claimed that there are adequate arrangements to supply the appropriate paddy seeds at the right time. Further, the quality control and seed certification system need to be rendered more effective.

There is immense scope for increased fertilisation of coconut, arecanut and tapioca but these do not seem to have received the attention they need.

The expenditure incurred for the conduct of a number of demonstrations, training camps and seminars formed 80 to 89% of the targets. A considerable number of the sprayers and dusters kept by the Blocks are

found to be in disrepair. Despite the sizeable growth in the quantum of Co-operative credit to agriculture, the co-operatives in the package districts do not seem to have fulfilled the provision of substituting security oriented credit by production oriented credit in any appreciable manner. Further, the complaints of farmers regarding insufficiency of credit received and procedural delays have become more articulate with the expansion of credit functions. Nor have the Co-operatives in general registered the requisite progress in developing the multifarious services to the farmers. Their record in respect of mobilisation of savings and building up the banking habit leaves room for improvement.

The continuance of the IADP in its original form needs to be re-examined in the light of the above developments. It is worth considering whether the Intensive Programmes now pursued in the five out of the ten districts of the State may not be replaced by a comprehensive programme covering all the ten districts in which the Elah scheme, the SFDA and the MFAL will be fitted in properly.

INTERIM APPRAISAL OF CRASH SCHEME FOR RURAL EMPLOYMENT IN KERALA 1971-72

Introduction

To relieve the distress caused by unemployment and underemployment in the rural areas, a country-wide scheme namely 'Crash Scheme for Rural Employment' was formulated with the prime purpose of providing "quick and direct employment to at least some specific numbers at the district level". This scheme as designed to be operated through the State Government with 100 per cent Central Assistance commencing from April 1971.

The specific objective of the scheme is to generate additional employment through a network of rural projects of various kinds which are labour intensive and create productive assets. The Evaluation Division of the State Planning Board has undertaken a concurrent evaluation of the implementation of Crash Scheme for Rural Employment in Kerala. Detailed field enquires are being conducted in one selected C.D. Block of each of the ten districts of the State. The results of this intensive investigation will be available in full only by the middle of 1972. Meanwhile it is considered useful to attempt an evaluation of the progress of the scheme on the basis of the data furnished by the B.D.Os. This report embodies the interim appraisal of the scheme relating to the progress of the projects in the first seven months of 1971-72 (April to October 1971).

Methodology

As per the guidelines issued by the Government of India and as per the decision taken at the conference held at the Secretariat, Government directed the Dist. Collectors to submit project proposals for their district covering the following type of works on or before 20-3-'71.

- 1) Rural infrastructure including road works.
- 2) Land reclamation and development of panchayat land.
- 3) Drainage, embankments.
- 4) Water conservation-cum-ground water works.
- 5) Minor irrigation works.
- 6) Soil conservation schemes requiring manual labour.

Proposals have been formulated accordingly at the pro-rata of Rs.12.5 lakhs for each district by the State Government. These proposals were accepted by the Government of India in toto and Dist. Collectors were asked to carry out the approved works. Specific sanction for implementation of these schemes was issued on 23-4-'71. The works will have to be carried out by a committee consisting of the Chairman of the B.D.C., one panchayat president, one panchayat member and other interested members. G.O.'s annual allotment of Rs.125 lakhs for 1971-72 has been distributed equally among the ten districts in the State at the rate of Rs.12.5 lakhs for each district for implementing the project proposals.

Findings

Although the project works was formally inaugurated in several blocks in April 1971, the B.D.Os could not go ahead with the implementation of the programme and incur expenditure till 15-7-'71 mainly on account of the delay in finalising the agreement to be executed by the Executive Agency. As indicated in the progress report of B.D.Os, the number of C.D. Blocks where the field operation under the Crash Scheme for Rural Employment started upto the end of October 1971 comes to only 99 out of 144 blocks. The delay is mainly due to the non-availability of well considered and appropriate projects.

The category of soil conservation and other land development works was given only a low priority not more than six soil conservation projects out of a total of 295 projects were taken up so far.

Suggestions

Road development works account for about two-third of the total expenditure incurred so far while priorities in the scheme envisaged indicate only a third of the total outlay on this account. The basis towards road construction needs to be corrected and the development of resources re-ordered with a view to speeding up of the execution of minor irrigation works.

It is well known that a considerable part of the agricultural land on watershed basis needs urgent conservation treatment and a good many small holders can ill-afford the prohibitive expenditure on the same. This calls for free or highly subsidised soil conservation measures. It is learnt that there is no dearth of such schemes. There is a strong case for including many more of these projects in the crash scheme.

The data furnished by the B.D.Os. indicate the imperative need streamlining the arrangements for expediting and ensuring the most efficient execution of the works taken up. Renewed efforts will still have to be made to make sure that the implementation of the scheme is in strict conformity with its objectives.

REPORT ON THE UTILISATION OF SHORT TERM AGRICULTURAL CO-OPERATIVE CREDIT IN KERALA

Introduction

Since the adoption of national economic planning more especially with the commencement of the Third Five Year Plan - there has been a spectacular growth in the quantum of co-operative credit made available to the farming community. There was also an increasing shift of emphasis from protective to productive credit and also from security oriented credit to production oriented credit. These developments largely associated with the promotion of the "Green Revolution" have invested the problem of utilisation of credit with a new significance.

The arrangements to provide crop loans for instance met a long-felt want and the provision of credit on the basis of ascertainable and specified needs definitely paved the way for its legitimate use. It is not easy to get a precise measure of misutilisation of credit though there is considerably evidence pointing to extensive unproductive use of the same.

In the present study it has not been possible to employ methods of enquiry sophisticated enough to collect the required quality data. It had to be content with the rather crude procedure of one time interrogation of the borrower who is hardly equipped to furnish the information needed. It is hoped that the study will not only focus attention on this important aspect of co-operative credit, but also facilitate the formulation of a more effective credit policy.

The main objective of the study was to test the hypothesis that member - borrowers of primary agricultural credit societies are tending to divert an increasing part of the proceeds of loans they take to purposes other than the approved categories. In case diversion was found to take place on a significant scale it was considered useful to probe deeper into its nature, motivation and impact on the credit structure.

Methodology

59 credit societies were selected at random from all the districts of the State, the number of societies selected from each district was proportionate to the amount of credit issued in that district in 1967-68. From each of the selected societies, 5% of the loanees were selected systematically using a random start. Thus as many as 773 borrowers were contacted. The reference period of the study was the co-operative year 1968-69.

The field enquiry was conducted in all the nine districts during 1969-70. The officers of the Evaluation division contacted the concerned officers of the Co-operative department as also institutions connected with co-operative credit for collection of qualitative data.

Findings

Co-operative credit registered remarkable growth in Kerala State during the last fifteen years, the amount of short-term and medium-term credit distributed in 1971-72 was estimated to exceed Rs.35 crores which was the target set for 1974-75. This expansion has been the result of the liberalisation of the standards of lending and the launching of IADP in the two districts of Palghat and Alleppey. It was found that all the three institutional components of the three-tier credit system progressed rapidly. Not less than one-sixth of the borrowers contacted (126 out of 773) readily confessed that they diverted the loan proceeds to purposes not mentioned in the application.

The propensity to divert was stronger in sub-marginal farmers where holdings obviously were uneconomic. The field enquiry has not fully succeeded in assessing precisely the extent and nature of misutilisation. It has yielded some useful inferences relating to the gravity of the problem and the environment which breeds diversion.

Though the scheme was in operation for a period of four years it could not be put through in a manner which satisfied either the lender or the borrower. Some diversion of credit to unintended use takes place because the loan is not received at the right time and in adequate quantity for the purpose on hand. It is gratifying to note that the Service Co-operatives in Kerala now account for about 60% of the total volume of fertilisers distributed though their share in transactions relating to other inputs is perhaps still negligible. Today the agricultural marketing societies remain the weakest link in the chain of co-operative societies.

Suggestions

The motivation behind misutilisation is complex and therefore its remedy cannot be simple. The present supervisory arrangements leave much to be desired. The District Co-operative Bank Inspectors who are charged with the responsibility of supervision and verification do not seem to exert too much in this direction with the result that little information is received regarding the actual utilisation of loans.

The feasibility of re-introducing the "full finance scheme" with suitable modifications may be explored. Since a part of diversion of short term loans is accounted by its utilisation for the purchase of livestock, machinery and implements, misutilisation on this score can be eliminated by adequate provision of medium term loans. This might be pursued till the full finance scheme materialises.

One basic condition needs to be fulfilled for maximisation of productive use of credit. Not only the borrower should be convinced of the increased returns resulting from the application of loan proceeds to farming but also the constellation of facilities indispensable for the same is available in a reasonable measure. These include the inputs like seed, fertilizers, pesticides and supporting services such as irrigation, transport and marketing. Sound labour relations and prospect of disposing the produce at reasonable prices are important motivational factors. All these lead to the conclusion that the absorptive capacity of the borrower can be increased and correct utilisation ensured only if the distribution of credit form an integral part of the package of promotional services.

EVALUATION OF SOIL CONSERVATION WORK IN 'R' BLOCK KAYAL AREA IN KUTTANAD (A CASE STUDY)

Introduction

With the launching of the Five Year Development Plans, soil conservation has become an integral part of the agricultural development programme. In Kerala the programmes were initiated during the First Five Year Plan, although the achievements were nominal. The Second, Third and Fourth Plan period envisage further expansion of the programmes and about two third of the total expenditure is accounted for by the construction of contour bunds on hilly agricultural lands.

Government of Kerala have since 1961 initiated schemes for extending assistance to cultivators for construction of permanent ring bunds in Kayal, Kari and Kole lands with rubble masonry and the work was started in 'R' Block Kayal of Kuttanad Taluk during 1961-62. Flood hazards and intrusion of salinity had habitually restricted cultivation in this area to a single crop. A case study on soil conservation work in Attumuttathu Kayal Area undertaken by the Evaluation Division of the State Planning Board in 1970-71, throws some light on the work carried out in the area which is adjacent to the 'R' Block.

Objectives

The main objectives of the scheme were to construct rubble masonry outer ring bunds along the entire boundary of the 'R' Block Kayal and provide suitable inlets and engine locations so as to convert the single crop paddy field to double crop paddy field under controlled conditions. An attempt has also been made to assess the benefits in relation to cost incurred. The coverage is limited to 'R' Block Kayal area.

Methodology

The entire 'R' Block Kayal has been divided into 8 sub blocks. The number of beneficiary cultivators as per Revenue Records was only 33 at the time of implementation of the scheme. The first Block is owned by a single beneficiary cultivator. Three other cultivators belonging to each of the Sub Block were selected at random from the list of beneficiaries for detailed field enquiry. Thus altogether 22 cultivators were chosen for the collection of data. The investigators posted in Alleppey, conducted the field enquiry under the direct supervision and guidance of the District Statistical Officer, Alleppey. The cultivators were contacted once in a fortnight to collect information. The senior officers of the Evaluation Division visited some of the beneficiary cultivators and made on the spot assessment of the work done under the scheme. They

also discussed the relative problems with the Director of Soil Conservation, the District Soil Conservation Officer, Chengannur and the Executive Engineer, Irrigation, Alleppey and other interested persons.

Period of Study

November 1970 to November 1971.

Findings

There has been a substantial increase in the real increment per hectare of cultivated land during the past two years. This may be attributed to the rise in income mostly from coconut cultivation. The risk involved in the cultivation of 'R' Block hitherto cannot be measured exactly. Abundant opportunities for increasing the returns from the scheme area which emerged as a result of the implementation of the scheme are not measurable. The addition of perennial crops like coconut, as also other changes in the cropping pattern, yield the full benefits only after a time lag of five to ten years.

The prevention of flooding which was of a recurring nature, however, is found to be not an unmixed blessing, as it blocked up the flow of rich manurial deposits into the cultivated land and further contributed to the wild growth of plant weeds. These in turn led to significant increase in the cost of cultivation of paddy and substantial deterioration in paddy yield which induce the cultivators to resort to commercial dry crops.

The average size of the holdings is at present reduced to 0.71 hectare from the minimum size of 3.2 hectare which existed at the commencement of the scheme. The large holders have sub divided their holdings in the 'R' Block probably in order to circumvent the ceiling of land fixed as per the Kerala Land Reforms Act. In view of this reduced size of holdings, the scope for commercial farming in paddy crop in the scheme area has dwindled.

The pace of implementation of the scheme is found to be too slow, perhaps all was not well with its planning. Moreover, necessary procedure in respect of the execution of agreements as envisaged in the Land Development Act, does not appear to have been gone through at the very start. Otherwise schemes which could have been successfully implemented within a year or two was long delayed.

The 'R' Block scheme sponsored by the Department of Soil Conservation under the Land Development Act is still under execution by the Major Irrigation Division (PWD), Alleppey. Despite the starting of the work under the scheme as early as in 1961-62, it has not yet been fully implemented. A significant portion of the expenditure incurred so far could have been avoided, if the work was completed at least within a period of three years.

The delay in completing the work can be attributed to the delay in installing the pumpsets in the area as proposed in the revised scheme and the filing of writ petitions in the High Court for one reason or other by the beneficiaries for want of proper execution of agreements as contemplated in the Land Development Act.

A considerable part of the work as per the original scheme was completed as early as in 1962-63. By the end of 1963-64 it was possible to complete almost the entire work under the scheme. The cost of operation of pumpsets installed in the area, cost of spare parts and other labour charges accounted for the expenditure incurred on the scheme since then. During early 1970, the construction of retaining wall, bund formation, pumphouses etc. were almost over. The balance of work involving an outlay of Rs.3 lakhs was taken up in November 1970 and towards the end of 1971-72 only a small portion of the work was left behind to be completed. According to the Executive Engineer, Irrigation Division, Alleppey, this work could be completed in a fortnight at an estimated expenditure of Rs.5000. Immediate action is called for the completion of work and the preparation of the RRL so that the recovery of part cost from the beneficiary cultivators could be commenced.

Suggestions

One suggestion offered by some knowledgeable persons was to collect a betterment levy from the cultivators according to their size of holdings in the 'R' Block, annually with a view to recover the part cost and other recurring charges for pumping operations. This was feasible because the beneficiary cultivators are getting a substantial surplus consequent on the implementation of the scheme.

Another suggestion was to write off the expenditure incurred by Government in this regard and to continue the operations of pumpsets at Government cost being a prestige pilot scheme of the State. The returns accruing from the 'R' Block in future will definitely justify the action of Government as proposed above by way of realising increased taxes, foreign exchange, etc.

Another view expressed was to execute necessary agreements with the concerned beneficiary cultivators in 'R' Block so as to recover 75% of the total cost of the scheme in 15 annual instalments with 4 1/2% interest as envisaged in the scheme. Further, the maintenance and operation of pumpsets installed may be handed over to a padasekharam committee consisting of the representatives of the 'R' Block area instead of entrusting there to the individual beneficiary cultivators.

The installation of 21 pumpsets with low capacity in the 'R' Block has added to the operational cost heavily. The operational cost could be made more economical if only half a dozen pumpsets having a capacity of 100 H.P. each, are installed. The increment cost of installation of pumpsets has to be shared by the cultivators according to their size of holding. This, in fact has induced them to refrain from the execution of the required agreements with the Government.

On examining the above view points, it may be stated that none of them can be recommended in toto. The bottleneck now experienced in getting the agreements executed by the beneficiary cultivators in regard to the handing over the pumpsets can be removed if arrangements are made to entrust the pumpsets installed in the 'R' Block with the PWD. as is done now and to impose the betterment levy annually on the beneficiary cultivators so as to cover the cost of operation of pumpsets etc. With regard to the recovery of part

of the cost of construction of ring bund, cost of pumpsets etc. from the beneficiary cultivators, necessary steps may be taken urgently in that direction as contemplated in the Land Development Act as soon as the work is completed.

With a view to curbing the tendency to keep the much needed cultivable land in 'R' Block as fallow, necessary provision of the Land Utilisation Act may be enforced. The excess land held by the cultivators in the 'R' Block Kayal may be taken over by Government immediately and distributed to landless labourers, who may be encouraged to adopt co-operative or joint farming.

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Tirunelveli District Administration
Tirunelveli, Tamil Nadu
Date: 01-09-94
0-7933

PIG BREEDING FARM-CUM-BACON FACTORY (A Case Study)

Introduction

With the aim of providing nutritious and protein rich food a crash programme was initiated at the national level during the Third Five Year Plan with the establishment of seven Pig Breeding Farm-cum-Bacon factories in the country. In Kerala too, a project was taken up as a Centrally Sponsored Scheme at an estimated cost of Rs.20 lakhs. The objective of the scheme was to promote pig development in compact areas with a view to assuring a regular supply of pigs to the Bacon Factory for processing and manufacturing quality pork and pork products for home consumption and for export.

Objectives

To promote pig development in compact areas with a view to assuring a regular supply of pigs to the Bacon Factory as envisaged under the scheme and to afford ready remunerative market for the improved pigs reared in the village under sanitary and hygienic conditions and for processing and manufacturing quality pork and pork products for home consumption and for export.

Methodology

10 Piggery Development Blocks were started around the Bacon Factory. 100 breeding sows and 6 boars of improved stock were supplied to selected breeders of the ten blocks at subsidised price. The prime motive behind the setting up of the ten blocks was to ensure a regular supply of not less than 12,000 of the progeny per year to the Bacon factory for slaughter.

Findings

The main setback with the piggery development scheme was that it could not ensure a steady flow of pigs to the Bacon Factory. Against the target of 12,000 pigs from Development Blocks to the Factory the achievement in 1971-72 was limited to 733. Most of the individual breeders expressed their dissatisfaction and resentment towards this programme because of the financial loss and procedural complexities. The scheme of providing pig feed at subsidised rates has had some impact at the initial stage. But pig feed did not become popular with the breeders because of its high price and inadequate supply in the market.

Regarding the working of the Bacon Factory it has been reported that facilities do not exist for the economic utilisation of waste products which constitute nearly 55% of the live weight of the animal. Marketing arrangements especially advertising and other promotional efforts require a thorough re-orientation and revitalisation. Technical and administrative bottlenecks have also aggravated the teething troubles of the factory. The deep freezing room originally proposed and set up is not yet insulated and this had created storage problem especially in respect of raw products.

Actually water scarcity during summer is reported to be one of the main impediments retarding the progress of the working of the factory despite the existence of an overhead tank with a storage capacity of 1 lakh litres. The Department has brought this matter before Government with a proposal for obtaining water from Piravom river. The availability of adequate water at all times is a determinant factor in any expansion scheme of the factory.

Suggestions

Institutions like hostels, seminaries and other boarding houses and owners of hotels, vegetable stalls etc. who are willing to participate in the programme should be selected for the commercial production of yorkshire pigs as large quantities of wastes are available with them. As an incentive to the breeders and to reduce the maintenance cost of pigs capital assistance in the form of long term loans for the construction of piggery, installation of pumpsets and purchase of a jeep may be given.

Pig fattening could be made a profitable enterprise for many rural households. It is reported that a pig would attain its optimum weight of 80 kg. after 7-8 months. Ordinary rural households can keep two pigs at a time for fattening and earn about Rs.76 for every 5 months on Rs.15 per month without incurring any additional monetary cost. Intensive extension efforts are required to convince the unsuccessful breeders the economic advantage of the fattening scheme and to make them participate in it. If this is done on an expanded scale a steady supply of pigs to the Bacon Factory for slaughter would be ensured. It should also be made obligatory on the part of the factory authorities to purchase the pigs reared or fattened by the cultivators and a strict time schedule should be adhered to in the process of buying the pigs and making payment to the producer. Also, the proposal for the establishment of a Pig Breeding Farm-cum-fattening Station at the Factory premises at Koothattukulam should be expedited and made into a model farm.

Immediate steps should be taken to manufacture pig feed at cheaper cost utilising mainly wastes from the Bacon Factory and other locally available materials. However, a permanent scheme for the distribution of pig feed at subsidised rates is neither warranted nor economically viable.

Facilities do not exist for the economic utilisation of waste products (55% of the live weight of animal). Therefore possibilities of manufacturing products like bone meal, blood meal, meat meal, calcium tablets etc. by utilising these wastes may be explored even now instead of destroying them. This may help to augment the money returns of the factory and to reduce the cost of production of main products to a considerable extent.

At present raw products like pork, beef, meat, chicken etc. are stored in ice tanks with a maximum capacity of 800 kg. The technical aspects of this problem may be considered and suitable action taken in this regard.

Although it is envisaged in the scheme to run the factory on commercial lines, the management of the factory has been constrained by departmental regulations and procedures. Paucity of working capital is reported to be a serious constraint on the smooth working of the factory.

In view of the none-too satisfactory working of the factory a Corporation to run the factory on commercial lines may be thought of. The various fattening stations that are now under way, Animal Feed Processing Units etc. may be integrated under the proposed Corporation.

CRASH SCHEME FOR RURAL EMPLOYMENT IN KERALA 1971-72

Introduction

It is recognised that unemployment and under employment are the most corrosive factors in the economic life of India. With the increasing pressure of population and progressive deterioration in the size of operational holdings self employment on farms can scarcely keep the farm workers employed for the whole year. This scheme is designed to provide quickly and directly employment to nearly 4.2 lakhs of people at the rate of 1000 persons in every district for a period of 10 months in an year, at the prevailing off-season wage rates. Although it envisaged in the nature of relief work to the unemployed and the seasonally under-employed agricultural workers, it also intends to create some permanent infrastructure for rural development.

Objectives

The study seeks to (1) assess the progress of the crash scheme in terms of the objectives envisaged in the programme, especially creation of employment and productive assets and manner of execution (2) to highlight the problems relating to organisation, administration and execution of the project works.

Coverage

The survey covers the entire State of Kerala as the crash scheme for rural employment is implemented in all the 144 C.D. Blocks in the State during 1971-72.

Methodology

One C.D. Block from each of the ten districts was selected purposively for detailed survey. The field enquiry was conducted by the Investigators posted for Evaluation work in the districts under the supervision and guidance of the concerned District Statistical Officers. In addition to the field enquiry monthly progress reports on CSRE have been collected from all the 144 Block Development Officers in a prescribed proforma during the year 1971-72.

Findings

The implementation of the scheme in the first year of its introduction in the State exhibited a different picture. The road construction works accounted for nearly 77% in the place of works of agricultural production. Only about 27% of the sample workers were reported to have been recruited from families where no adult member is employed already. This indicates that in the recruitment of the workers for the project work the norms prescribed were seldom followed.

The durability of assets created in the crash scheme for Rural Employment Programme is in question as evidenced by the low materials content for these projects (14%). If material content is raised and other development

projects are dove-tailed, more permanent projects could be generated and more employment could be ensured in the long run with multiplier effect.

The scheme was intended to provide relief to agricultural labourers during the slack seasons. There is no prolonged agricultural slack season in Kerala due to perennial crops and multiplicity of crops.

There was heavy rush of expenditure during the last quarter which accounted for nearly 79% of the total expenditure during the year. 54% of the total amount was spent during the month of March 1972 alone. This uneven distribution of work and consequent spending has to be avoided at all cost so as to realise the objective of providing continuous employment to the needy persons for a period of ten months. During 1971-72 it is reported to have generated 40.81 lakh mandays of employment as against the initial target of 25 lakh mandays. The total employment generated however appears to be less than what is reported in view of the higher wages paid in most of the works. The average number of days of full employment provided per sample worker in respect of the 51 project works (covered by the survey) came to 39 days during the year. This formed only less than 67 per cent of the average number of days (58) of work per project.

Though the responsibility for implementing the project is vested with the local Beneficiary Committee the actual execution is by a nominee of the Committee, who himself may be a Contractor and is expected to render voluntary service. In an attempt to accommodate the claims of various panchayats and pressure groups, works have been scattered all over the Blocks. The principle of concentrating works in those areas where the degree of unemployment is more acute or where the need for development is more urgent, is found sacrificed.

Of the total 51 selected project works under study, 31 were found completed involving an expenditure of Rs.4.55 lakhs accounting for 91% of the outlay. The project estimate seemed to be higher than the actuals in the case of two blocks.

The average rate of wages in the 51 project works was found to be Rs.4.56 per day as per the information furnished by the selected workers. This would mean that every Rs.100 spent on wages could generate on an average nearly 22 mandays of labour as against the official claim of 27 mandays. This leads one to infer that the actual wages paid to these workers in the projects under study were more than what was reported. In the absence of clearly defined off-season the variation in the seasonal wages is insignificant.

Another factor to note is the high level of literacy among the unemployed in the State. Nearly one out of every 5 among the unemployed is a matriculate.

Suggestions

In the absence of adequate information relating to the occupation pattern of the families in the concerned localities, it is but natural to disregard this criteria at time. This calls for a fullfledged socio-economic enquiry of the project area to provide the supporting bench-mark data before taking up

similar programmes.

A shelf of qualifying projects may be got ready and relevant decisions taken sufficiently early so as to ensure steady and smooth operations in the coming years.

As contract system is not consistent with the spirit of the programme, it is suggested that the nominee of the Beneficiary Committee may be compensated for his supervisory work. This will avoid any room for seeking profit and help to maintain accurate data on project work, especially employment and wages.

The idea of making projects an integral part of the area development plan seems to have been neglected. Steps may therefore be taken to prepare district plans which reflect the specific requirements of areas of chronic unemployment and underemployment.

The project estimate seemed to be higher than the actuals in respect of two Blocks. Had realistic estimates of project works prepared it would have been possible to take up additional number of project works and utilise the full allotment promptly without any risk of lapse.

Where agricultural labour is organised, it has been found difficult to engage labour for anything less than the going wage-rate which is more than Rs.4 per day for an unskilled worker. Therefore, the ceiling on wages should not be insisted upon.

The scheme, as it is implemented is mainly in the nature of relief to the unemployed. However, a careful analysis of the nature and magnitude of unemployment and underemployment in the State suggests that adhoc measures and relief projects will not solve the problem. Hence as the Expert committee has pointed out, only projects which will lead to capital formation, increase in productivity and introduction of new technology besides the creation of employment, should be recommended.

For it is clear that our 'poverty problem' is not merely one of employment alone, but also of income generation. Employment and income can be raised only by better use of the economic, social and physical assets which the State already has. Hence policies on investment, land use, industry including small scale industry with appropriate technology, credit and marketing will have to be drawn up to maximise employment and income.

INDUSTRIAL ESTATES IN KERALA

Introduction

The Second Plan defined the principal objectives of the Industrial Estates as "enabling a number of small scale units to have the advantage of common services and other facilities". Although, the programme was accepted by the Government of India much earlier only a dozen estates were sanctioned in the last year of the First Five Year Plan. 107 new estates were sanctioned by various State Governments during the Second Plan period of which 66 estates had been completed. Significant progress was registered towards the end of March 1968 - out of 500 sponsored Industrial Estates, 360 were completed and 240 started functioning. 70,000 persons found employment and a sum of Rs.22 crores was spent on this programme.

It was proposed to start one Estate in each district of Kerala State during the Second Plan and the amount provided was to the tune of Rs.92 lakhs. It was possible to start only 7 Estates during the period with a total expenditure of Rs.78.23 lakhs. During the Third Plan period 11 estates started functioning. Thus, altogether 18 Estates came into existence in two series at the end of the Third Plan in the State which came into existence in two series - eight came under the first series and the rest in the second series. The emphasis during the Fourth Plan period is on consolidation of the existing Industrial Estates. All the Estates are administered by the Corporation through a Superintendent/Administrative Officer posted in each estate on behalf of the Director of Industries and Commerce.

Objectives

The study is undertaken with a view to highlight the problems confronted by the Industrial Estates in their attempts to attain the objectives of the Industrial Estate Programme in general and to ascertain the areas of achievement and failure in this regard.

Methodology

All the 18 Industrial Estate in the State and the industrial units working in these estate form the subject matter of the study. Information relating to the units and the industrial estates were collected by the Investigators under the guidance and supervision of the concerned District Statistical Officers during 1970-71. Further, the Senior Officers of the Evaluation Division of the State Planning Board, also made on the spot study of most of the Industrial Estates. Period of the survey was during 1970 71.

Findings

130 industrial units were covered in the study. Out of this 117 were new units in the sense that they were either new entrants in the industrial field or extension or branches of old units functioning elsewhere. Only 13 units have shifted from outside the estates.

The new industries functioning in the estates represent a net addition to industrial output and employment. Although the quantum of direct employment generated was not of much significance, it has opened up direct and indirect employment opportunities to many and eased in a small measure the pressure on land.

The industrial estates have proved that enterprises like Metal and Allied Industries, Chemicals, Rubber and Plastic industries, Wood Industries, etc. function as viable units even in the small scale sector because most of the existing units could earn net return.

Though the programme is basically sound there are drawbacks also in respect of the selection of sites for the location of Industrial Estates and the construction of factory sheds. Nearly 40% of the area are left vacant in respect of one-third of the total number of estates. The economic potential of the places had not been investigated in advance. So they lack the attractions of a good industrial locality - a marketing centre, source of raw-materials, centre for transshipment, etc. The factory sheds constructed for various purposes were seen on a uniform pattern without assessing the actual or potential demand. So the entrepreneurs were faced with the problems of adjusting their requirements to the type of sheds offered.

It is worth mentioning that more than 47% of the capital investment made by these units came from private savings and borrowing from Banks. Only less than 25% of the funds were derived from promotional institutions such as Kerala Financial Corporation, Kerala State Industrial Development Corporation etc. This only shows that the Industrial Estates have helped to mobilise the saving of small entrepreneurs.

There have been considerable delays in starting actual production after the factory sheds were occupied by the industrial units. This was attributed to the delay in the supply of power, installation of plant and machinery, absence of adequate water supply, lack of working capital and paucity of rawmaterials. Not a single unit in the Industrial Estate at Kollakadavu could function for want of supply of power for five years after the allocation of funds.

Most of the entrepreneurs functioning in the Estates are not happy about the managerial role of the Kerala Small Scale Industries Corporation. The estates are now managed by the K.S.S.I.C. through a Manager or a Superintendent whose main and perhaps the only function is collection of rent.

Suggestions

Since the Industrial Estates in some of the large Industrial Estates are likely to expand in future, a feasibility study may be conducted in this regard and necessary steps taken for the bulk acquisition of land near and around such estates of high potential. It may also be worth considering whether the vacant land now left in Ernakulam, Karunagapally, Manjeri, Kasaragode, Palakkad and Olavatt estates can be converted into industrial plots and leased out to entrepreneurs for starting industries rather than building up shed.

As the construction of sheds proceeded the selection of industrial units, several entrepreneurs have to face difficulties and problems in adjusting their

requirements to the type of sheds offered. . . would have been better if there had been some flexibility in the type of factory sheds provided ot suit different requirements of the occupying units. The fixation of rent can be subjected to periodical review based on the facilities provided and the general performance of the units concerned. Further, instead of renting out, a lease cum-sale arrangement may be thought of with a view to yielding quicker turn over of funds invested.

The major problem facing several of these units was one of low productivity. To oboviate this the units are to be given a preferential treatment in the distribution of scarce inputs, provision of technical know-how, financial assitance and other requisites.

**FOURTH FIVE YEAR PLAN - KERALA
REVIEW FOR THE PERIOD 1969 to 1972**

Introduction

The report describes the progress in carrying out the programmes and policies embodied in the Fourth Plan during the three years 1969-70 to 1971-72. It also indicates on the basis of information presently available, the levels of expenditure and development which are likely to be realised by the end of the Plan period. This will help to focus attention on those aspects of the implementation of the Plan which require special attention at this stage, so that more rapid progress can be achieved during the remaining period of the plan.

Observations

The performance of the Plan schemes during the first three years of the Fourth Plan revealed significant gaps in the achievement of physical targets although financial outlays have been proceeding according to schedule. During 1969-72, the aggregate expenditure on State schemes constituted nearly 67% of the total outlay envisaged in the Fourth Plan. With an anticipated expenditure of Rs.14.00 lakhs during the last two years, the total expenditure at the end of the Plan would exceed the plan outlay by about 22%.

In agriculture, the actual expenditure during the first three years constituted nearly 49% of the Plan outlay. Significant shortfalls in expenditure were noticed with respect to programmes such as Agricultural production (40%), S.F.D.A. (15%), Animal Husbandry (40%), fisheries (38%) and warehousing and marketing (26%). This was partly due to non-allotment of funds in the annual budgets and partly due to the delay in execution of approved schemes. Nearly 98% of the allotted funds were expended during the period. 95% of the outlay is anticipated to be spent by 1973-74.

In Co-operation and Community Development it is found that 93% of the plan outlay has already been spent during the first three years. A realistic assessment based on plan provision was not possible as the structure of the Fourth Plan schemes had undergone a change due to the inclusion of a major scheme and transfer of certain other schemes to Agricultural Production and Minor Irrigation 101% of the allotted funds were expended during the period. About 171% of the outlay is anticipated to be spent by 1973-74. It is found that the sector processing, marketing and consumer service, co-operatives has to go a long way to justify its development role. Hence after identifying and analysing the real snags and bottlenecks corrective measures are to be taken immediately for enabling the co-operatives to render useful and meaningful service in the above fields and to constitute its share to the gross national product.

As regards irrigation (major and meidum) the actual expenditure during the first three years of the Fourth Plan works out to 61% of the total Plan

provision, the achievement in terms of the benefitted area is far below the expected level. Under flood control, an expenditure of about 53% has been incurred during 1969-72. In respect of Anti-sea Erosion 45% of the provision was expended during 1969-72.

In power, most of the efforts were devoted to commissioning of the Kuttiyadi Power Station and for continuance of the works of Idukki Hydel Project. Power generated registered an increase of 41.8% during the first three years of the Plan period.

Regarding Large and Medium industries 59.5% of the outlay was expended during the first three years of the Plan period. It is anticipated that the Plan target will exceed by 18% at the end of the period. The pattern of expenditure indicate that these sector is capable of absorbing any quantum of investment. Thus, the real problem in the State has been that the investment made is inadequate to effect the desired impact on industrial development. Under Mineral Development 33% of the Outlay had been spent during the first three years (1969-72), Village and Small Scale Industries dominate the Industrial Sector of Kerala. It absorbs the majority of the industrial labour force, the total expenditure incurred during the first three years of the period of account for 53% Handloom industry expended 69% of the Plan outlay during the first three years thereby exceeding the financial target by the end of 1973-74. Handicrafts accounted 42% of the provision at the end of the third year and a shortfall of 10% of the outlay by the end of the Plan period. The Plan envisaged a comprehensive scheme for the development of coir industry which provides employment to about 10 lakhs workers and earn foreign exchange to the tune of Rs.15 crores an year.

The main emphasis was to revitalise the industry and to improve the condition of Coir workers 49% of Plan outlay was expended during the first three years of the Plan period. The Plan envisaged to take adequate steps for the promotion of small industries in the State by providing all possible facilities. It provided an outlay of Rs.325 lakhs for service facilities to SSI units, for the setting up of Industrial Testing Research Laboratory and for arranging additional facilities in the existing 18 Industrial Estates and for opening functional estates. During the first three years of the Plan period 52% of the outlay was spent for the various schemes.

The major items of work proposed under Roads & Bridges were the opening of new roads, improvements to existing roads and the construction of major and minor bridges. The total expenditure incurred during the first three years of the Plan period exceeded the aoutlay by about 17%. The provision proposed for the Kerala State Road Transport Corporation was to rationalise the long and medium routes to the extent possible, to put new buses on the road and to replace few buses. The expenditure incurred at the end of the third year was 54% of the Plan outlay. The provision under 'Ports and Harbours' during the Plan was for taking up spill over schemes as well as for taking up new schemes. Only 26% of the outlay was expended at the end of the third year, the reasons stated were (i) the non-availability of suitable crane (ii) the final payments for the installation of electric crane and dredger units for minor and intermediate ports could not be made due to non-fulfilment of certain guarantee repairs and (iii) the first stage payment was made in the case of multipurpose sea going dredger.

For the development of Inland Water Transport, the provision was mainly intended for the continuance of spillover schemes, construction of new boats, purchase of tools and plants and acquisition of land. The expenditure exceeded the target by 50% of the end of the third year of the Plan. It is anticipated that at the end of the Plan the expenditure will work out to 26% of the total outlay. The implementation of the scheme under 'Tourism' can be considered satisfactory. 60% of the outlay was spent during the first three years of the Plan period.

A few reforms were proposed under 'General Education' to improve the quality of our educational system. It is seen that 88% of the total outlay was spent during the first three years of which elementary education and secondary education surpassed the respective outlays. The anticipated expenditure at the end of the Plan period is 45% higher than the plan outlay. In view of the imbalances that have crept up between the supply and demand for technical personnel, no new Engineering Colleges or Polytechnics were to be started during the Plan. One Junior Technical School and two prevocational training centres were started. 32% of the outlay was spent till 1971-72 and 86.5% is expected by the end of 1973-74. The shortfall is mainly due to procedure delay in undertaking work through other departments and in regard to the purchase of equipments. Another factor is the unavoidable delay in implementing new schemes due to want of duly qualified personnel for industrially oriented courses, under Cultural Programmes, the funds of various schemes are operated by different agencies. As a result of this, it is difficult to appraise the programme as a whole, provision set apart for the development of museums, and erection of toy train, Sree Chithra Arts Gallery and Zoological gardens will exceed by 48% at the end of the plan period. A sizeable portion of the outlay is earmarked for grant-in-aid schemes. Only 20% should be spent for the first three years. Much shortfall was noticed in the expansion of activities of Sports Council. No amount could be spent till 1971-72. The reason for the uneven progress may be attributed to the operation of the funds by different departmental agencies like Directors of Public Instruction, Technical Education and Museum and Zoo, whose share is insignificant compared to the total fund allotted to their departments. Hence the need for a separate department for co-ordination and successful implementation of the programmes may be thought of.

The provision under Water Supply include spill over schemes and new schemes for nine towns. It was able to overfulfill the target during the first three years (112%). The total expenditure estimated by the end of the plan would be 227%.

The main emphasis under Health Services is on the stabilisation and quality improvement of the existing facilities, 38% of the outlay was expended for various schemes during the first three years of the plan period and 86.4% is the anticipated expenditure by the end of the Fourth Plan.

As against the provision under Health for centrally sponsored schemes (intensification of family planning programme) 50.4% could be spent during 1969-72. It is likely that the target will be achieved at the end of the plan period.

The programmes under Housing are subsidised industrial housing, low

income group housing, village housing project, etc. The expenditure during the first three years exceeded the plan target by 12%. It is likely that 234% could be spent during the plan period. Central sector outlay is set apart for housing schemes for employees of local bodies. It is observed that among the various schemes under housing, low income group scheme provided to be very successful.

Town improvement and Urban Development are the main programmes under Urban Development. 68% of the outlay has been utilised during 1969-72 and the likely expenditure at the end of the period will be equal to the plan target.

One of the objectives under welfare of backward classes was the improvement of the living conditions of socially and economically backward sections of the community by providing education, economic uplift, housing, health, etc. 42% of the outlay has been utilised during 1969-72 and the percentage of likely expenditure at the end of the plan period will be 109%. Under Social Welfare, the programmes include welfare for Women and Children and for Moral Hygiene and after-care services. Only 19% of the plan provision could be spent during the first three years and the likely expenditure at the end of the plan period will be 43%. The expenditure incurred for the programmes of Craftsmen Training and Labour Welfare during 1969-72 was 61% of the outlay. The expected expenditure during 1969-74 will exceed the plan target by 22%.

The slow rate of progress on schemes under miscellaneous sector during 1969-72 was reported to the delay in getting administrative sanction to some of the proposed schemes. About 52% of the plan outlay was expended during 1969-72 and the total expenditure during 1969-74 will thus exceed the target by more than 22%.

SOIL CONSERVATION WORK IN THE CATCHMENT AREA OF KUNDAH PROJECT

Introduction

Kundah Project is one among the 14 major hydro-electric projects in the country where soil conservation works have been initiated. The project comprises a total area of 450 sq. miles of which 22 sq. miles are in Kerala.

Objectives

The main objectives of the study are (1) to review the progress of implementation of soil conservation programme in the catchment areas (2) to assess the benefits accrued due to the implementation of the scheme and in particular the effect on the rate of silting, and (3) to suggest remedies for the difficulties experienced, if any, in the implementation of the programme.

Methodology

The study is confined to three sub catchments (VII, VII A, & VIII) out of ten catchments in Kerala where catchment area works were reported nearing completion during 1970-71. Four sample beneficiaries were selected by the method of simple random sampling from each of the sub catchments. To other beneficiary plots adjacent to the selected beneficiary plots were also chosen to constitute one cluster for detailed enquiry. Four clusters consisting of 12 beneficiary plots in each of the sub catchments thus formed the sample unit. Six plots were also selected from sub catchment-II as control plots. The data relating to the beneficiary plots, prior to the implementation of the programme were also collected. The senior officers visited some of the beneficiary cultivators and made on the spot assessment of the work done under the scheme. Qualitative information pertaining to the scheme were also collected from knowledgeable persons of the locality. Discussions were held with the Director and other officers posted in the project area. The period of survey was one year from 15th November 1970.

Findings

Of the total catchment area, private forests occupy nearly 50%, reserved forest 36% and the rest of the area are cultivated with annual crops and plantation crops. It is seen that soil conservation measures could cover only 2324 hectares of land in the first priority areas of the catchment upto 1971-72. It is observed that nearly 51% of the first priority area, the implementation of the scheme entailed 71% of the provision upto 1971-72. The average cost for works under soil conservation treatment comes to Rs.1033 per hectare as against the norm of overall cost of Rs.500 laid down by the Government of India. The enhanced rate thus appear reasonable in view of the steep terrain of the land and the increase in the actual cost of construction. It is too premature to make an assessment of the impact of the scheme on the cultivation, silt rate, crops etc. since it has been launched nearly three years back. The number of people benefited by this scheme upto 1971-72 in all the sub catchments is 1311, of which 808 persons are in sub catchments VII, VII A & VIII.

It is found that 58% of the total selected beneficiaries in sub catchments VII, VII A & VIII possessed holding size between 1 to 3 hectares and about 31% belonged to holding size between 3 to 5 hectares during the period under study. The principal occupation of majority of them being agriculture. 97% of the aggregate area (101.1 ha.) of the selected beneficiaries are owned and the rest taken on lease. About 99% of the area have been brought under cultivation of which only 3% of the area have irrigation facilities.

The practice of cultivators in the area is to cultivate only a part of their land every year and to leave the remaining as fallow. During the following season this portion is put under some crop while the cultivated land is allowed to lie fallow. This practice is the reason for the low intensity of cultivation in the scheme area. The yield from perennial crops appeared to be very insignificant both before and after the implementation of the scheme. In the case of seasonal crops, there was some increase in the annual average yield per hectare for jowar, ragi, groundnut and redgram. In respect of other seasonal crops, the average yield has fallen slightly. This is attributed to the lack of sufficient rains during the year.

The cropping pattern in the selected beneficiary plots and the control plots were more or less identical during the year 1970. But at the time of field enquiry (1971) it has undergone many changes due to failure of rains. The control plots had very little impact on the yield, most of which were under groundnut for which the requirement of water is low. But it is seen that the net income per hectare of cultivated area was higher in the beneficiary plots as compared to the control plots.

In the absence of any bench mark data on the rate of silting, it is difficult to assess the achievement in this regard. The rate of silting could not be assessed as the scheme has been implemented in this area only recently and a small portion of the targetted area has been covered so far.

Suggestions

Due to paucity of irrigation facilities in the area and apathy of the local people in adopting improved agricultural practices, a considerable part (34% to 38%) of the selected beneficiary plots was found left uncultivated even after the implementation of the scheme. This only highlights the need for educating the people of the locality to cultivate their land in full by adopting improved agricultural practices. For this, provision for irrigation facilities, which is a 'must' should be ensured and necessary follow up action should be taken either through soil conservation staff or through the staff of Attapady Tribal Block Development Office.

Unscientific cultivation in the deforested and unconserved areas combined with the lack of follow up action in the conserved areas have contributed much to the enhanced silt formation in the Seruvani river. Only after the completion of the whole scheme, the percentage of silt load could be reduced considerably. Similarly, to achieve the benefits contemplated fully under the scheme, it would be desirable to entrust the follow up works to the Soil Conservation Department. Nearly 1.5% of the total length of the contour bunds constructed as per the scheme has been broken in parts without follow up action.

The implementation of the scheme has suffered a set back at the initial stage due to lack of trained and experienced personnel posted for the work.

In order to have a more realistic picture on silt evaluation, two additional silt guaging stations may be opened in appropriate places.

Urgent steps may be taken to see the works completed in the first priority areas before 1973-74 and the R.R.L. prepared so as to initiate recovery of loan amount without least delay.

The owner's of beneficiary plots are not very enthusiastic about the scheme or about its possible benefits. Since majority of them are hill tribes and poor cultivators, it may be difficult to recover from them 50% of the expenditure on the works as stipulated in the programme.

It is worthwhile to consider whether the soil conservation measures envisaged under the scheme should be viewed as part of the integrated development of the Tribal Block in Attappady so as to make the area more result-oriented and achievement conscious.

AN EVALUATION REPORT ON OIL PALM CULTIVATION, THODUPUZHA

Introduction

Oil palm is a tropical crop which is found to thrive well in the eastern tracts of the midland region of Kerala. The cultivation of oil palm was taken up at Thodupuzha in 1961 as a pilot project, by the Department of Agriculture. The scheme was sponsored and financed by the Indian Central Oilseeds Committee for tribal and development of important varieties of oil palm in Kerala.

Objectives

Since oil palm is a new introduction into the State a cost-benefit analysis of its cultivation was considered necessary. It competes with other tree crops viz. coconut and rubber to some extent, an attempt is made to compare the economics of it with these two crops.

Methodology

The cost benefit analysis based on actual experience in the field is not possible in this stage. But the trial cultivation or pilot project in the Government Oil Palm Station at Thodupuzha and relevant published literature elsewhere provide some insights into the production potential and the various advantages of this crop. Actual input output and cost benefit details for the first ten years could be obtained from the records maintained at the Government farm. About the future performance inferences have been drawn from experience elsewhere and by consulting experts in the Department of Agriculture and the Plantation Corporation of Kerala. To examine the economic worthiness of the project indicators generally employed such as benefit-cost ratio, pay back period and internal rate of return have been used.

Findings

From the results, oil palm cultivation appears to be an economic proposition in the State. It provides more favourable returns to capital, higher benefit-cost ratio and shorter pay back period as compared to coconut and rubber. Risks and uncertainties connected with the price and yield variations are minimum for oil palm. This aspect has got significant implications in the replanting and rehabilitation programmes. Despite all these economic advantages our present knowledge is limited regarding the suitability of oil palm in all the areas where coconut is successfully grown. Further coconut is essentially a small holders crop and all the products and by-products of coconut palm are used for various domestic requirements which is not true of oil palm.

The technical problems connected with the processing of oil palm fruits for extraction of oil presents a major hindrance in the wider acceptance of this crop by farmers. The cost of processing is too heavy for the small farmer to take advantage of it. The harvesting process becomes extremely

difficult as the palm grows taller.

Suggestions

- (i) Non-availability of seeds, lack of facilities for extraction of oil from Kernel, difficulty of harvesting of bunches from all palms, etc. pose some problems and these have to be tackled before it can be propagated widely.
- (ii) Technical knowledge regarding its processing, especially the extraction of kernel oil, the utilisation of by-products (kernel cake) etc. seem to be inadequate. Hence there is urgent need to develop such expertise by training suitable persons outside the country.
- (iii) The feasibility of cultivating oil palm in areas already affected by coconut disease may be investigated, so as to develop it as a substitute crop for coconut in those areas.
- (iv) There is need to augment research on the edible and commercial uses of Palm Oil so as to extend its market.
- (v) The importance of market expansion for palm oil needs to be stressed. There are only few buyers to bid for this product at present. This is partly due to inadequate extension and insufficient knowledge on the part of consumers both industrial as well as domestic. Proper attention has to be given to expand the market for palm oil along with efforts to increase production, so as to ensure remunerative price to the producers.

SOIL CONSERVATION WORK IN KANDAKADAVU

Maruvakad padasekharam - A case study

Introduction

During the first two plan periods some concrete steps were taken to popularise soil and water conservation practices on agricultural lands with Government aid and assistance. The scheme for soil conservation on agricultural lands envisages the construction of contour bunds at specified vertical intervals on hilly agricultural lands forming complete or at least self defended watersheds, by the land owners themselves. This was the only scheme implemented during the First and Second Plan periods. It visualised the construction of contour bunds in the two padasekharams in order to protect the paddy fields from flood hazards and the intrusion of salinity from the sea.

Objectives

1. To review the progress of implementation of soil conservation programmes in the scheme area and to assess the extent to which the objectives envisaged have been attained.
2. To assess the benefits accrued due to the implementation of the scheme in relation to the costs incurred.

Methodology

All the beneficiaries were listed and were stratified into four groups according to the size of holdings. From each stratum a sample of 5 per cent beneficiaries was selected by simple random sampling method. The selected beneficiaries were contacted by a trained Investigator once in a fortnight to collect relevant information. The senior officers of the division visited some of the beneficiary cultivators and made on the spot assessment of the work done. Data prior to the implementation of the scheme and qualitative information from knowledgeable persons of the locality were also collected.

The period of the field study was from Feb. 1972 to Oct. 1972.

Observations

The scheme visualised the construction of contour bunds in the two padasekharams in order to protect the paddy fields from flood hazards and the intrusion of salinity from the sea. About 400 hectares of paddy fields in the scheme area have been properly protected now and the winter crop has become an assured crop. Though the full impact can be assessed only after a period of 8 to 10 years after the implementation of the scheme, there are indications now that the cultivation has become more stabilised and the element of uncertainty reduced considerably. There has been substantial increase in the income realised per hectare after the launching of the scheme. This is attributed mainly to the rise in yield from paddy and coconut cultivation and prawn fishing.

Though the average cost of cultivation of paddy per hectare has been increased, the returns received are comparatively high. Thus the net returns per hectare has increased by two to three times their previous level.

The net area under cultivation has not increased even after the launching of the scheme. No change in the cropping pattern has been reported consequently. The same cultural practices adopted formerly are still continued. Agricultural operations commence, as before, during April. Only 'Pokkali seed' a short duration local variety is grown in the scheme area as was done prior to the programme and fertilisers are seldom applied. HYVs have not been found successful due to the flooded condition of the fields. Tractor ploughing has not so far become popular, though some cultivators are found adopting the same.

Suggestions

It was observed that the same cultural practices adopted formerly are still continued in the area. The possibilities of improving them need to be explored. Government is at present meeting the cost of annual maintenance including repairing of bunds which amounts to Rs.25000 to 30000 a year. The beneficiary ryots are getting increased income through regular and profitable paddy cultivation and prawn fishing consequent on the completion of the scheme. In the light of the above, Government have to consider whether the annual maintenance at the cost of the public exchequer is really warranted. It is to be noted that this type of concession is not extended to similar other schemes.

Also the feasibility of imposing a betterment levy on the beneficiary cultivators with a view to recover at least a part of the initial cost incurred by Government may be thought of.

The usufructs from the coconut trees given to the padasekharam committee was found to be too low when compared to the yield of trees and the prices of coconut now prevailing. The possibility of giving this right for a period of 3 to 5 years on the basis of competitive tenders may be looked into.

Permanent rubble masonry for outer bunds in the place of the present earthen bunds will be more economical in the long run both to the Government and the ryots. The feasibility of this may be considered.

If the Kumbalangi-Ezhupunna spill way is constructed covering only a length of about 150 metres the saline intrusion on the eastern side also can be checked effectively thereby making available additional area of 400 hectares of land for paddy cultivation. This also needs to be examined.

A STUDY ON CO-OPERATIVE RURAL DISPENSARIES IN KERALA

Introduction

During the past two decades India has achieved remarkable progress in the fields of medical and public health activities. The mortality rate has declined from 27.4 per 1000 in 1949-50 to 15.1 per 1000 in 1971-72. Life expectancy at birth has gone up from 32 years in 1951 to 50 years in 1971. During the Fourth Plan efforts were made to strengthen P.H. Centre complex in the rural areas. Some of the rural areas in Kerala do not have adequate medical facilities. About 450 Panchayats in the State were reported to be lacking in modern medical facilities in 1971-72. It is in this context that the pilot scheme of establishment of Co-operative Rural Dispensaries was drawn up under the Special Employment Programme in 1972-73 and under the Half a Million Jobs Programme in 1973-74, with the twin objectives of (i) providing modern medical facilities in Panchayats where such facilities do not exist and (ii) giving employment to unemployed medical graduates. It aims at reducing financial strain on the Government for extending medical facilities and for relieving unemployment among trained personnel.

Objectives

The study seeks to:-

- (i) examine how the Co-operative Dispensaries have helped the rural people in the matter of medical aid.
- (ii) study their financial structure and economic viability and
- (iii) highlight the problems faced in the successful implementation of the scheme.

Methodology

Six Co-operative Rural Dispensaries were purposively selected from each of the districts of Trivandrum, Ernakulam, Trichur, Malappuram, Kozhikode and Cannanore for detailed investigation. It was conducted during the first fortnight of July 1974. For canvassing detailed information, spot visits were made by the Officers of the Evaluation Division.

Observations

As a device to extend medical facilities in rural areas, which are not adequately served at present, the present scheme has much to commend itself. Although none of the Panchayats, where the scheme operated, were totally lacking in medical facilities, the level of services rendered was far from satisfactory. In the choice of location of these dispensaries, preference was given to locations nearer to village centres or markets, mainly due to better facilities of communication. The relative success of some of these dispensaries are mainly attributed to their advantageous location, few of them are contemplating of setting up extension centres in up country areas.

Five out of the nine dispensaries have started functioning within a period of about three months after registration of the Society. In respect of six reporting Dispensaries, three Dispensaries showed good performance in genera-

ting income. The average monthly income of these three were well above the average monthly income anticipated in the original scheme. The average monthly expenditure incurred are found to be more than the average monthly expenditure estimated in the scheme. Three Dispensaries viz., Koothattukulam, Kazhakuttam and Kanhangad could earn a reasonably good profit during 1973-74. These Dispensaries have proved that they have the potential to be an economic and efficient agency for rendering medical services to the rural population. Government's commitment in the scheme is only Rs.30,000 per Dispensary as non-recurring expenditure and Rs.6,000 per annum as recurring managerial grant. Hence the per capita capital Government expenditure is insignificant as compared to that for Departmental dispensaries and health centres.

Suggestions

- (i) At present the service conditions of the medical and para-medical staff are not attractive. Hence it is necessary to frame common service rules for these personnel.
- (ii) There is need for provision of facilities for consultation by specialists in these dispensaries.
- (iii) The Committee may not be able to meet at short notice for the recruitment since all of them are very busy officials. It is felt that the Committee need recruit only the Medical Officer and the authority for selection of other staff may be delegated to the Managing Committee of the Dispensary.
- (iv) The authorised share capital of the Co-operative Dispensary is Rs.1 lakh consisting of 4,000 shares. In most of the cases no special effort was so far made to increase the membership and thereby increasing the paid up share capital after they have been registered. Some sort of preferential treatment by way of concessions in consultation fee or in service charges to members has to be thought of as an incentive.
- (v) All Co-operative dispensaries are at present housed in temporary buildings which lack even the minimum of amenities required. Besides, they are not able to find suitable quarters to the Medical Officers and some of the para-medical staff. They can raise loan capital from Co-operative Banks and other institutions for providing permanent buildings and amenities for the Dispensary and its staff.
- (vi) These Dispensaries may turn out to be commercial ventures devoid of any social objective. One of them has enhanced the consultation fee from Rs.1 to 2 and has introduced special rates for emergency consultation. This might result in restricting the number of patients and denying the benefits of these Rural Dispensaries to the poorer sections of the society.
- (vii) There must be proper technical guidance and supervision of the Government Departments viz., Co-operative Department and Health Service Department by the officials for short periods. It is also necessary to make effective participation of the 5 Government nominees in the meetings of these Board of Directors. This will prevent these Co-operatives from degenerating into pocket societies of local factions.

A REPORT ON THE WORKING OF THE LABOUR-CUM-DEVELOPMENT BANK, ERNAKULAM.

Introduction

The scheme for Massive Employment through Labour-cum-Development Banks is conceived as a programme for combating unemployment and poverty in rural areas by combining both employment and growth objectives by converting idle manpower in rural areas into resources for rural development. The Government having accepted the scheme in principle selected Ernakulam district for the implementation of the scheme as a pilot project. The Bank has been registered on 31.3.1973 with the whole of Ernakulam district as its operation. It started functioning from 5.7.1973.

The objectives of the scheme are the following:

- (i) To provide employment to rural people especially the landless agricultural labour and small and marginal farmers.
- (ii) To create permanent productive assets in rural areas and stimulate growth by utilising idle manpower.
- (iii) To encourage self help by using the Bank as a self financing mechanism.
- (iv) To induce savings among the rural working class by a system of deferred payment of wages and to use it for productive investments, and
- (v) To mobilise popular support for development plan in rural areas.

This study was undertaken in pursuance of minute No.3(ii) of the meeting of the State Planning Board held on 3/1974 and 4/1974. The Labour-cum-Development Bank has just completed one year of its functioning. It is an experimental pilot project. A quick study was considered necessary in order to assess the nature of the difficulties the Bank has to encounter during the pilot stage of its operation and also to know how far the objectives laid down are realisable.

Methodology

It was conducted by a team of officers of the Evaluation Division of the State Planning Board. They held discussions with the Board of Directors during the months of June and July 1974. They had visited the project sites and held discussions with a few of the beneficiaries, workers and knowledgeable persons in the locality. This report is based on the relevant information collected from the offices of the Bank, the B.D.O. Alengad, the Asst. Engineer, M.I., Alwaye as well as the impressions formed during field visits.

Observations

Of the nine schemes mentioned in the Pilot Project Report, detailed estimates were worked out only for five schemes. Out of this Government accorded sanction only for the four Lift Irrigation Schemes, thereby indicating their preference for such schemes. One of the these four was dropp-

ed by the Bank for cost consideration. The bye-laws of the Bank provide for three classes of membership viz., beneficiaries, labourers and institutions such as panchayats, co-operatives, social welfare agencies and individuals interested in the working of the Bank. Each beneficiary has to enter into a legally binding agreement with the bank for the recoupment of the cost.

The three schemes taken up by the Bank are in various stages of implementation. The expenditure incurred works out to only 30.4% of the total revised estimate. Labour content forms 73% of the total expenditure whereas material content comes to nearly 22%.

The Bank, as it is working at present will not be able to function as a self financing organisation for the following reasons:

- 1) There is no proposal to recoup even the full capital cost of the schemes from the beneficiaries.
- 2) Cost of supervision and administration charges are not added to the cost of the project and proposed to be realised from beneficiaries, and
- 3) While the beneficiaries are not charged any interest the Bank has to pay 9% interest on the deferred wages component.

Government will have to continue its support to the Bank indefinitely to make good these deficiencies. Annual phasing does not seem to have been attempted by the Bank in the Pilot stage.

The beneficiaries are required to repay in six half yearly instalments an amount of Rs.600 per acre of area benefited. The basis on which this amount is fixed is not explained. Statistics regarding the availability of idle labour in the localities selected is not readily available. The rules regulating the withdrawals of the deferred wages after three years are yet to be framed.

It appears that at present there is a dearth of processed projects with the Bank for execution in a phased manner. As such the Bank was not able to substitute for the two schemes with similar ones. The extent of popular participation was not adequate.

The workers now engaged in the projects under execution are likely to put forward claims for continued employment in the new projects away from their localities. Out of the total B class membership of 741 only 238 workers could be provided with work in the three projects even during periods of peak activity. It seems that the Bank has to be more discrete in its B class membership campaign.

The material content works out to 75% of the labour cost according to the revised estimates of the three schemes under implementation whereas it was assumed not to exceed 25%. This became necessary as these projects are all lift irrigation schemes with high material content.

The schemes could be executed without any land acquisition charges as the beneficiaries and even non-beneficiaries concerned have willingly surrendered land free of charge in these three projects. But none of the schemes under implementation were initiated by local groups or Panchayats as envisaged in the approach paper.

It is learnt that periodical inspection and check measurement by competent authorities are not strictly adhered to in the execution of works.

The Bank envisages the transfer of completed projects to the concerned department for maintenance. If the responsibility of maintenance is transferred, it may be difficult for the Bank to guarantee satisfactory service in respect of timely irrigation etc. to the beneficiaries even during the period of cost recoupment. Kottuvally Kayal scheme was one of the five schemes included for implementation in the Pilot Project Report. Government accorded sanction only for the four Lift Irrigation Schemes. The Bank is now intending to bifurcate the above scheme and to take up a part of it as a separate scheme for prawn fishing.

Suggestions

The deferred wages are withdrawable only after three years. The rules regulating the withdrawals after three years are yet to be framed. Unless proper rules are framed in advance for the phasing of withdrawals, this may create serious financial difficulties for the Bank.

Even if there is no shortage of productive schemes in the immediate neighbourhood, there may not be enough of such schemes at the panchayat level in future. As per the original proposals local workers have to be given preference for employment in the projects taken up. The Bank has to evolve a definite policy in the matter of selection of workers as between the existing members and local workers in the matter of employment.

Though higher material content of the schemes is a deviation from the original proposals, flexibility in this respect may be necessary for ensuring durability of the assets created. Local enthusiasm both on the part of the workers and beneficiaries have been noticed in the three projects. To sustain popular involvement, it is necessary that schemes were initiated for implementation from local groups and panchayats. The fate of Aduvanthuruthu L.I. scheme though sanctioned is a clear example. Hence the desirability of enacting an enabling legislation for the execution of socially beneficial schemes disregarding the objection of minority group of dissidents and empowering the Bank to recoup the cost from the beneficiaries has to be seriously examined.

The actual supervision of the works was vested with the convenor of the concerned Project Implementation Committee who is a Village Extension Officer having neither the needed technical qualification nor experience. Hence it will be difficult for the superior officers to give directions of a technical nature regarding the quality of work to the local supervision. These aspects have to be looked into for ensuring quality of work and financial propriety.

Thus, the concept of the Bank as a self financing agency could not be subjected to full field test.

MINOR IRRIGATION IN KERALA

Introduction

The importance of minor irrigation in the overall strategy of agricultural development in the State cannot be over emphasised. An appraisal of the performance of the schemes and their impact will and to our understanding of their very nature and help better planning of further development. The main focus of this study has been on the problems of irrigation from tanks, wells, diversion structures and drainage works which constitute the major categories of minor irrigation works in the State.

Objectives

The main objectives are:

- (i) to appraise the planning process in the formulation of minor irrigation schemes
- (ii) to assess the irrigation potential created their extent and actual utilisation
- (iii) to analyse the problems of utilisation of irrigation facilities provided and follow up action taken
- (iv) to study the problems of organisation administration and co-ordination, and
- (v) to assess the impact of the minor irrigation schemes on production, cropping pattern, employment, etc.

Reference Period : The first three years of the Fourth Plan (4/1969 to 3/1972).

Coverage : Eight districts out of the ten districts.

Methodology

One Community Development Block was selected from each of the district so that each of the CD Block has the largest number of public minor irrigation projects started and completed during 1969-72. From each of the selected CK Block, one Public Minor Irrigation work from type having the largest command area has been selected subject to a minimum of four projects, for detailed study. Thus, 48 projects spread over in eight districts constituted the sample.

The field work of the study was conducted during the period from June 1973 to December 1973.

Observations

Out of the 48 schemes selected, three were executed by the blocks and the remaining 45 were implemented directly by the Department. The expected life of the various types varied widely. It ranged from an average

of 5 years for tanks, 6 to 7 years for culverts and 20 years for lift irrigation projects.

It has been found that the actual area benefited from the sample projects comes to be much less than their estimated potential. Instances have been reported where irrigation tanks constructed under the MI schemes could not irrigate any land at all, but was used for other purposes such as bathing, soaking of palm leaves etc. The average cost of construction per project was lowest for well and highest for lift irrigation.

Nearly 95% of the beneficiaries of these minor irrigation schemes were marginal farmers in the holding size group of less than one hectare and 80% of these were in the group of less than 0.40 hectare. Analysis of the data showed that most of the sample projects selected were for stabilisation of the second crop rather than for raising an additional crop, either through extension of the area or through increase in intensity of cropping from the same field. Even in the areas where a third crop could be raised, no such attempts were made mainly because of the uncertainty regarding water availability.

The major reason for the under utilisation is lack of adequate maintenance. It has been estimated that the capacity of wells and tanks in Kerala have been reduced by 30 to 47% due to sitting or an average capacity of 3% per annum. Most of the sample cultivators visualised additional supply of irrigation water more in terms of repairs and renovations of existing works rather than construction of new ones. The Irrigation Department is not responsible at present for the maintenance except in the case of lift irrigation and class I works. The performance of the panchayats which are entrusted with the routine repairs and maintenance of these works has not so far been satisfactory either due to lack of finance and technical personnel under their control or lack of sufficient interest. All the sample cultivators were of the opinion that the panchayats were not performing this function properly.

Most of the beneficiary cultivators have very little awareness about the efficiency of water use. They are under the notion that more water they use, the better the crop.

Presently Irrigation Department is not responsible for the manner in which the water is actually used in the field. Its responsibility ends with the creation of the facility and the Department is not concerned either with its actual distribution among the farmers or its use among the crops.

The full potential of the sources of minor irrigation in the state remained unexplored. Even the existing sources are limited and the problem is aggravated during the dry session due to want of sufficient storage capacity. Hence it is necessary to augment the supply of water and to rationalise its use through proper planning and co-ordination among the various agencies.

Commencement of M.I. Projects is to be preceded by detailed investigation covering various aspects of hydrology, location, soil pattern of cultivation and ascertaining of the ayacut, etc. Further, in the context of increasing cost the economic limit has to be revised according to location.

Inordinate delay in the execution of works leads to considerable loss of potential production and escalation in cost of projects. The main

reasons were the formalities, with the obtaining of No.Objection Certificate and acquisition of land. The existing procedures are cumbersome and time consuming and hence require simplification.

Organisational procedures cause delay even in case of emergent works. Land acquisition is being done by the Revenue Department. It needs to be amended.

In order to reduce the wastage of water through seepage during transmission, the advisability of lining the water channels of lift Irrigation Project at least in stages may be considered.

The beneficiaries may be called upon to pay water rates in proportion to the advantages derived by them. As the water rates collected at present are so low and in many instances no levy is imposed it is difficult to cover even the cost of maintenance. Hence there is need to rationalise the system of assessment and collection so that these projects may not continue to be a drag on the public exchequer.

Since water charges are based on the acreage irrigated, excess use is not prevented. Measuring the volume of water delivered to each farm presents difficulties. Therefore, some devise to distribute water on the basis of time taken or by treating the block as a whole as the point of measurement for levying charges by the government may be thought of while individual farmers would pay on the basis of area irrigated. Thus the more efficiently water is used and the larger the area benefited, the average rate per acre would become less.

Research on soil-plant-water relationship need to be strengthened as the present knowledge about the consumptive use of water and the efficiencies of various methods of irrigation is rather limited.

To ensure efficient management of available irrigation water, there is need to streamline the administrative machinery for greater co-ordination at the field level among the Revenue, Minor Irrigation and Agriculture Departments.

It is necessary that programmes of rural electrification should be dovetailed with minor irrigation schemes for energing pumpsets connected with wells and lift irrigation projects. A systematic study may be carried out of various river basins in the State to explore the possibilities of lift irrigation.

At present statistics on irrigation is inadequate and whatever data is available are only approximations. Even land use and crop statistics in the State are collected through sample surveys to provide State level estimates. Therefore, various aspects of land use statistics including irrigation need to be collected after detailed survey of each area as is done in most of the States.

Scheme for the free supply of Pumpsets to Panchayats.

Introduction

The scheme for the free supply of pumpsets to Panchayats was one of the important schemes implemented during the Fourth Plan to increase food production in the State. A novel feature of this scheme is the proposed involvement of the Local Bodies in the Planning and execution of the Projects. It depends very much on the extent of utilisation of irrigation potential created and the benefits accrued to the cultivators.

Objectives

- The study is intended to:
- (i) assess the extent of the utilisation of the pumpsets.
 - (ii) study the economics of pumpset irrigation, and
 - (iii) identify the bottlenecks in the proper utilisation of the pumpsets.

Methodology

- Three categories of pumpsets were selected for the study, viz.,
- (i) Pumpsets supplied to panchayats under the free supply scheme
 - (ii) Pumpsets owned by individual cultivators, and
 - (iii) Pumpsets owned by co-operative societies.

From each district 4 CD Blocks selected for the survey on HYV of Paddy (1973-74) was first selected and from these Blocks a minimum of six panchayats having pumpsets supplied under the scheme during the Fourth plan period were then selected. From the Panchayats so selected, a minimum of 14 pumpsets in each district was selected representing the three different categories of pumpsets. Thus a total of 188 sample pumpsets were selected representing all the districts in the State.

Reference Period

The study relates to the agricultural year 1973-74 and the survey was conducted during the latter half of 1974-75.

Findings

76% of the pumpsets supplied to panchayats were installed and only 53% working.

There was inordinate delay in the installation and commissioning of the pumpsets. The time lag between supply and installation was more than six months in the case of 64% of the pumpsets installed. Even after installation, the pumpsets remained uncommissioned for long periods. The time lag between installation and commissioning was more than 6 months for 31% of the pumpsets commissioned.

24% of pumpsets supplied to the panchayats was not installed at all due to want of pump houses or other reasons. Even in the case of the

pumpsets installed, many of them could not be commissioned and even when commissioned they could not be fully utilised.

It is significant to note that low water level was reported as the most common reason for the under utilisation of the pumpsets, 69% of the panchayat pumpsets commissioned could not be fully utilised for this reason. This indicates that the pumpsets, were installed without proper investigation of the water availability or potential in the particular region. Of the electric pumpsets installed 27% could not be commissioned for want of electric connection. Irregular power supply has hampered the proper utilisation of 18% of the electric pumpsets commissioned.

Pumpset irrigation is capable of increasing production in a substantial way, is established by the study on economics of privately operated pumpsets. Here, the benefit cost ratio of 1 HP pumpset (where the utilisation ratio is the highest) is seen to be 2.4 and the sample rate of return 31.5%. But this definite advantage of pumpset irrigation could not be realised to the desired level in the case of pumpsets supplied free of cost to panchayats because of the non-utilisation or under-utilisation of the pumpsets supplied, for a variety of reasons.

Suggestions

The panchayat in general have failed to discharge their responsibilities with respect to the proper maintenance and utilisation of pumpsets supplied under the free supply scheme either through indifference or inability to meet the financial commitments. Hence, it is suggested that the Agricultural Department should take immediate steps to recover the pumpsets from those panchayats for installation elsewhere, as provided under the Rules. For this purpose periodical inspections envisaged in the Rules should be strictly adhered to.

In cases where the pumpsets have been handed over by the panchayats to beneficiary groups, uniform rules should be framed specifying the obligations of the beneficiaries as well as of the panchayats regarding the operation, maintenance and repairs of pumpsets and fees to be levied from the beneficiaries etc. It is preferable if the beneficiaries organise themselves into Minor Irrigation Co-operatives. They may be entrusted with the responsibility of laying of leading channels and distributories, collection of fees etc. This will also enable them to raise needed capital through the normal funding channels for agricultural co-operatives. The extension machinery of the Agricultural Department should be geared to the task of organising such Irrigation Co-operatives.

The pumpsets which are found to be kept idle with the panchayat or misused may be removed for installation at technically suitable sites in keeping with the overall agricultural development plan, if any, of the panchayats concerned.

In the case of the pumpsets already installed, wherever the sites are found to be unsuitable due to low water level, the pumpsets may be removed to more suitable sites as far as possible.

Accessories may be supplied on a top priority basis for these pumpsets for which these have not been supplied for.

Wherever the pumphouses have not been constructed and incases

where the pumpsets already installed have to be removed to better sites, grants equal to 50% of the cost of construction as per type design may be given instead of the present practice of giving ad hoc grant.

In all cases where the ad hoc grant given for the construction of pumphouse and necessary civil works was not utilized or misused, steps may be taken to recover the amount from the panchayats concerned.

The responsibility for laying leading channels and distributories may be vested with the panchayats/beneficiaries concerned and at their own cost.

The State Electricity Board may be given directions to energise all the pumpsets awaiting energisation on a priority basis.

In case of difficulty due to the lack of capacity of the existing transformers, the pumpsets may be replaced by diesel ones of equal HP from other sites on a mutually beneficial basis.

There should be some arrangement at the district or State level for giving training in the operation of the pumpsets.

High Yielding Varieties Programme in Kerala (Virippu Paddy - 1973-74)

Introduction

The high Yielding Varieties Programme was introduced in the State since 1966. In view of the importance of this programme in the strategy for agricultural development and food, self sufficiency in particular within the State, a periodical evaluation was considered necessary. This report is based on the field enquiry conducted during Virippu, 1973-74.

Objectives

1. To assess the spread of High Yielding Varieties of paddy in different parts of the State and also to determine the extent of such adoption by cultivators.

2. To study the performance of the High Yield Varieties of paddy vis-a-vis the local varieties, in terms of their input output relationships and cost-returns structure.

3. To ascertain the reactions of cultivators participating in the programme and also to examine the constraints in the adoption of the programme on the part of non participating farmers.

4. To study the problems of implementation of the programme at different levels of administration. This will naturally include an appraisal of the organisation and machinery for the supply of important inputs, such as seeds, fertilizers and pesticides and adequacy of extension effort on the part of the implementing agency.

Methodology

The study covers all the districts of the State. From every district 4 C.D. Blocks and from each Block one paddy growing village have been selected adopting simple random sampling method. From each selected village a list of paddy cultivators has been prepared and 15 of them have been selected at random. Thus, in all, 60 cultivators from each district have been selected for detailed study for each season in 1973-74. The study covered altogether a sample of 562 cultivator households (those cultivating high yielding variety and those non high yielding variety) in 36 Blocks spread over the ten districts of the State. Data collected pertains to the Virippu season of 1973-74 (May 1973-August 1973)

Observation

Nearly 51% of the sample cultivators selected have adopted High Yield Varieties during Virippu season covering 41% of the total area under paddy. The adoption of H.Y.V. is seen to be positively correlated with the increase in the size of holding. Small size of holding is one of the inhibiting factors in the wide spread adoption of H.Y.V. Programme among the cultivators of the State. More than 80% of the sample holdings have less than one ha. and

44% smaller than 0.4 ha.in size. The rank correlation was low (0.36) for the small holdings and it was significantly high (0.95) for the large holding size as a result of the ranking of the districts according to the area under H.Y.V. The level of adoption was proportionately less for different reasons both among the illiterate class as well as those having higher educational qualification. Thus the coverage of the H.Y.V. does not seem to be directly correlated with the level of education.

The average cost of cultivation per ha.of H.Y.V.of paddy was nearly 27% higher than that of local varieties. This difference was due to high fertilizer and labour costs incurred on H.Y.V. The average yield was about 40% more than that of the local variety.

The net return from one hectare High Yielding Paddy was nearly 29% higher than that of local varieties (additional net return being Rs.365 per ha.) Though this should provide encouragement to the cultivators to grow H.Y.V., still the coverage of the programme as revealed by the study has been limited. Even among those who have adopted, it was found that only 25% have put all their area in the programme.

Viewed from the point of economic viability, the High yielding Paddy has only a slight advantage over the traditional varieties. The Benefit-Cost ratio as measured by the ratio of gross value output to cost of production was 1.67 for H.Y.V. as against 1.49 for the local varieties.

High yielding seeds per seed is not a sufficient condition for higher production. They only create an environment for efficient use of other inputs such as fertilisers, water and other elements of the new technology including management.

The production function analysis shows that among the independent variables selected fertilizer use and size of holding as the two major factor determining the yield of paddy both for the High Yielding as well as the non-High Yielding varieties. It implies that with our difficult man-land ratio, scope for enlarging the size of holding being strictly limited, some form of co-operative management and operation is necessary.

Suggations

1. Adequate and timely supply of inputs appears to be the main bottleneck on the whole programme of high yielding varieties for paddy. Though the supply of H.Y.V. seed is reported as generally satisfactory, the genetic quality and viability of the seed availed through private source is not assured as there is no comprehensive system of seed inspection and certification in the State.

2. The recommendation regarding fertilizer application to HYV paddy varied according to places and varieties of seed used. However, the actual dosage used by the sample cultivators were much lower than that of the recommended dosage.

3. The non-availability of plant protection chemicals and equipments in time and insufficient quantities even seem to have deterred many cultivators from adopting the HYVs. Nearly 24% of them stated proneness to pest attack as the major deterrant in their adoption of HYVs.

The supply and distribution of the plant protection chemicals was vested with licensed private dealers and co-operatives which were mostly guided by business considerations. There was no arrangement on the part of the Agriculture Department for the bulk purchase and supply of these chemicals for the licensors for distribution.

4. The credit available through the co-operative institutions was grossly inadequate to meet the requirements of cultivation of HYVs. The distribution of available credit was also uneven and inversely proportionate to the size of the holding. Due to low percentage of recoveries of outstanding credit, the provision of further credit has been restricted. Therefore, the collection machinery be strengthened and provision made for recovery of loans in kind at the time of harvest so that credit facilities may not get restricted due to non-repayment of outstanding debt. Availability of credit through other institutions such as the commercial banks and Government agencies was extremely limited and as such most of the cultivators had to resort to the unorganised sector for their credit needs.

5. There is urgent need to concentrate on measures to educate the farmer, especially the small farmer on adoption of the right type of agricultural practices so that he will be able to get the optimum return.

Evaluation Series - 25

*Soil Conservation (Contour Bunding) Programme in Hilly
Agricultural Lands - Kerala*

Introduction:

The Soil Conservation Programme aims at raising the productivity of land by suitable measures like contour bunding, terracing, kayalla bunding, etc. In Kerala, conservation measures are mainly restricted to contour bunding on agricultural lands on watershed basis and incashment of River Valley Projects. To assess the impact of Soil Conservation Programme (Contour bunding) on agriculture production, a continuing type of study has been initiated since 1968-69. This report is the third in the series relating to contour bunding in hilly agricultural lands.

Objectives:

1. To assess the progress achieved in Soil conservation works undertaken in selected regions.
2. To assess the impact of the scheme on crop pattern and productivity of land and its acceptance by the cultivators.
3. To identify the constraints and difficulties in the successful implementation of the scheme

Methodology

The study was conducted in all the districts (except Idukki) of the State, by selecting one scheme in each district for detailed analysis.. 12 beneficiary cultivators were selected by simple random sampling method for detailed enumeration from the list of beneficiaries under each scheme.

An equal number of control plots having the same type of cultivation was also selected near the scheme area within the Village for comparative study. The reference period of the study was the year 1970-'71.

Observations:

At present, priorities for selection of area for Soil Conservation treatment is not on the basis of the degree of vulnerability to erosion or the intensity of the soil conservation problem. No surveys have been made to determine the degree of vulnerability to erosion in the various areas. Priority is given to those areas where consent of land owners are received speedily and naturally non-technical considerations are found to predominate.

Among the 120 sample holdings, cultivated area constituted as high as 85% of the total area of holding, current fallow constitutes only 5% of the total. Since most of the land were having an undulating terrain, soil conservation measures were taken on nearly 85% of the total area.

A comparison of the data regarding the average stand of various tree crops on the control plots as well as on the sample plots prior to and after the adoption of soil conservation measures clearly shows that the average number of trees per holding has increased. The area under seasonal crops has also increased after the implementation of the scheme except in two districts viz., Kottayam and Alleppey.

The direct benefits were measured by finding out the yield rates of most cultivated crops in the sample plots prior to and after the implementation of the scheme. It ranged from 31 to 187% for Coconut, 2 to 40% for arecanut, 4 to 160% for pepper and 1 to 412% for tapiocca. It is true that part of the yield increase might be due to difference in the use of inputs, adoption of improved agricultural practices etc. Contour bunding undoubtedly helped that adoption of these practices and as such the higher yield rate of these crops could be credited to the soil conservation measures adopted.

It was noted that the average income per hectare on the beneficiary plots was considerably higher than that on the control plots except in two districts, viz , Kollam and Malappuram

Nearly 59% of the reporting beneficiary cultivators considered the execution of work as efficient and the rest moderately as efficient. 95% was satisfied with the technics of contour bunding as suitable to the respective localities.

As per rules, the maintenance of soil conservation works is the responsibility of land owners themselves. It was noticed that this work was not receiving proper attention, except in places where cultivators were very progressive. 60% considered maintenance and repairs as a serious problem.

The need for co-ordination of Soil Conservation work with extension efforts has not been fully appreciated because in the selected areas, extension efforts are very negligible in introducing conservation farming practices.

Repayment performance was found to be significantly better in all districts. This ranged from 8% in Ernakulam to 91% in Kollam which could be attributed to unfavourable seasonal conditions.

Suggestions:-

Areas most vulnerable to erosion hazards may get only lower priority if there is no organised effort to back it up. Hence it is necessary to fix priorities for State as a whole strictly on the basis of degree of erosion or intensity of the problem.

As per rules, the entire cost of contour bunding is initially met by the Government. After allowing a subsidy of 25% of the cost, the rest is treated as a loan to be paid back within a period of 15 years. The question whether subsidy should be allowed where

soil conservation measures are profitable to the cultivators and whether the rate of subsidy is adequate where it is not economical at present has to be examined.

Research in soil conservation has not kept pace with the progress of the programme in the State. Though the only Soil conservational research station in the State was set up as early as 1958, it is headed by a Research Officer. Detailed soil analytical works have not been carried out in the absence of well qualified and adequately trained personnel.

Land and soil being social assets, any wastage of these is a loss to the gross product available to the society. While individuals can afford to be short sighted, the State has to be concerned

about the optimum use of the natural resources and its development

It is therefore necessary that society too should bear a part of the cost in the form of subsidy at least for some time for such land improvement measures.

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High Yielding Varieties Programme in Kerala
(Mundakan and Punja Paddy 1973-74)

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Introduction

This study is in continuation of the earlier study on Virippu season paddy for 1973-74 (Evaluation series-24). The field work in respect of Mundakan and punja season was completed by June, 1974.

Objectives

(i) To assess the extent of adoption of High Yielding varieties by cultivators.

(ii) To study the comparative performance of High yielding varieties as against local varieties of paddy and

(iii) To examine the constraints - Physical, institutional and administrative in the implementation of High Yielding Varieties Programme within the State.

METHODOLOGY

Similar to the previous study, the survey covered all the districts in the State except Idukki, from each district 4 C.D Blocks and from each Block one Mundakan/Punja paddy growing village was selected by using simple random sampling method. 15 cultivators were selected at random from the list of cultivators (Mundakan/Punja paddy) prepared for each selected village. Thus 60 sample cultivators from each district were selected for detailed study.

Observations

46% of the sample cultivators adopted High Yielding Varieties during Mundakan season as against 53.2% during Punja. The area covered by the corresponding samples constituted 31% and 44% of the total paddy area under Mundakan and Punja season respectively.

Considerable variation was noticed in the rate of adoption of High Yielding Varieties as between various districts. Kottayam topped the list for Mundakan season paddy. Kannur reported the lowest percentage of the area and Thiruvananthapuram the lowest percentage of the samples using High Yielding Varieties. In respect of Punja season, the rate of adoption was found to be the highest in Malappuram where as the lowest rate in Kollam. On the whole the use of High yielding varieties was relatively higher in respect of Punja season in almost all districts mainly because of the better water management conditions.

The extent of coverage of High Yielding Varieties does not seem to be directly correlated with the level of education. As in the case of Virippu season, the number of persons putting their entire paddy land under

High Yielding varieties both during Mundakan and Punja seasons was proportionately more among the middle level of education i.e., from the primary level upwards and below the graduate level. The level of adoption was proportionately less both among the illiteratae and those having higher educational qualifications owing to different reasons. Similarly cultivators whose major source of income is agriculture naturally tend to devote more of their attention and efforts towards the production of H.Y.V. of paddy. The cost of Labour and fertilizers account for the lion's share of the total cost in both the seasons.

The performance of H.Y.V. was only slightly better than that of non H.Y.V. The differential was very little for the two seasons. The average return over variable cost was lowest for Mundakan (Rs. 582 per hectare) as against Rs. 1244.6 per ha. for punja season. Similarly, in respect of non H.Y.V. the return over variable cost per have being lowest for Mundakan (Rs. 1000) and highest for Punja (Rs. 2316). Further it is observed that the average cost per quintal of paddy worked out to be higher in respect of the H.Y.V. in both the seasons. The benefit cost ratio thus worked out to be more favourable in respect of the non H.Y.V. both for Mundakan and Punja seasons.

Suggestions

The major problem reported by the sample participants (86% under Mundakan and 85% under Punja) was those relating to the supply of fertilizers. The problem of pest attack ranked next accounting for 41% of the sample during Punja season. Lack of irrigation facilities was the second major problem during Mundakan seasons, the percentage of cultivators reported being 58. Inadequate irrigation facilities were also found among 37% of the sample cultivators during Punja season. Other difficulties reported were non-availability of plant protection chemicals (34% and 40%) and equipments (26% and 19%) and inadequate credit supply. (11% and 5%) for Mundakan and Punja seasons respectively.

Significant

Soil Conservation Programme in the Catchment Area of Kundah Project
(Kerala Portion)

Second & Third Rounds

Introduction

The Kerala portion of the catchment of Kundah Project forms part of the Attappady Tribal Development Block in Perinthalmanna taluk of Palghat district. The catchment area is composed of a series of undulating to steep terrain intersected by productive paddy fields in the valleys. The low lying paddy fields have high potential for raising double crop of paddy. The upper reaches are suitable for plantation crops like rubber, coffee, tea and cardamom. The unscientific soil management practices followed and the heavy rains during the monsoons have resulted in intensive soil erosion in the area. This had led to the silting up of the rivers, depletion of the fertile soil in the cultivated regions and shortening the life of the reservoirs of the Kundah Project.

The Kerala portion of the catchment area of Kundah Project has been divided into 10 sub catchment with a total area of 56979.8 hectares. Of these sub catchment I and VI are under Government Reserve Forests. The area seriously affected by soil erosion are in sub catchment Nos. III, VII, VII A and VIII. These areas are now under individual occupations and are completely denuded.

Objectives

The main objectives are:

- i. to review the progress of implementation of the S.C. works in the catchment areas and
- ii. to assess the benefits accrued due to the implementation of the scheme, in particularly, the effect on the rate of silting.

The second round of the survey was conducted in 1972 which covered sub catchment V. Besides, part of the subn catchment VII, VII A and VIII which were already covered during the first round (1971) was also studied. In addition, sub catchment III was studied as control. The third round of the survey covered sub catchments III and IV in addition to a few sample plots in all sub catchments studied during the previous rounds. Further some control plots from sub catchment II which were similar to the plots from sub catchments III and IV were also selected for comparative study.

Methodology

The same methodology adopted during the first round of the survey (evaluation series 17) was adopted in these rounds also. A list of beneficiaries in sub catchment V for the second round was got prepared from which a sample beneficiariess were selected by simple random method. Two other beneficiaries plots adjacent to the selected beneficiary plot were also chosen to constitute one cluster for detailed enquiry. Six such cultivators consisting a total of 18 beneficiary plots formed the sample unit for detailed investigation. For the purpose of control 18 plots were selected with care so that these were identical with that of the beneficiary plots. Thus the second round covered altogether 36 beneficiary plots and 18 control plots.

Similarly for the third round of the survey 44 beneficiary plots were selected from sub catchments III and IV by the method of simple random sampling. 16 clusters consisting of 48 sample plots were studied in detail and the data pertains to the reference year 1973. Besides, 8 control plots similar to the beneficiary plots were studied for purposes of comparison.

Observations

Analysis of the data from the sample beneficiaries show that the area under cultivation as percentage of the total area has gone up although this trend is not consistent every year on account of the adverse climatic conditions in the region. Soil conservation measures in the sample area did not seem to have brought about any significant change in the cropping pattern. This is because of the cultivation among the tribals and the vagaries of the weather. In subcatchment V, there has been a slight shift for jowar crop. The percentage area being 55 after the implementation of the scheme as against 44 prior to the implementation. Other crops, in order were ragi and horsegram. Their percentages of area were 30 and 14 respectively as against 13 and 38 before the implementation.

Data on yield of crops has been found:

(i) the yield increase of cholam in all the plots from 70% in subcatchment V to nearly 475% in subcatchment VIII.

2. in respect of ragi, the average increase varied between 35% to 50% in the selected subcatchments.

3. groundnut recorded yield increase ranging from 40% to 406% in the different subcatchment.

4. horsegram also recorded increase in yield rate, the highest was of the order of 156% in subcatchment VII.

The average annual gross income from crop production recorded an increase varying from 80% to 245% among the selected catchments. Similarly cultivation expenses recorded an increase from 48% to 800% among the selected sample holdings. This is due to the use of improved practices and the increase in the cost of labour. The employment generated in the conserved area is significantly large.

Despite the increase in the cost of cultivation, the annual gross income recorded an increase varying from 76% to 245%.

The income over expenditure varied from year to year consequent to the uncertain rainfall. However, the yield and income rates have definitely been higher after the implementation of the soil conservation works.

There is remarkable reduction in the silt load after the soil conservation measures though there is a slight increase for the year 1971 (Seruvani River)

In respect of Veragar River, the silt load has reduced remarkably during the years 1971, 1972 and 1973 when compared to the position in 1970.

Suggestions

Contour bunds constructed under the scheme have been broken or partly damaged in many places 66% of the beneficiary holdings have such instances. Although the responsibility for maintenance is vested with them, it is seldom attended to either due to poverty or indifference. Hence it is desirable to strengthen the machinery for attending to such works on a continuous basis.

No significant change in the cropping pattern can be expected unless there is provision for irrigation facilities and agricultural extension education among the tribal people who constitute the majority of the population in the region.

Steps may also be taken to include afforestation as part of soil conservation programme in the catchment areas. Unless urgent measures are taken to restore the forest wealth through a planned programme of afforestation the soil conservation works will not have the desired impact.

The scheme envisages a subsidy of 50% of the cost and the balance to be recorded from the beneficiaries in easy instalments. No steps seems to have been taken even after the lapse of a few years. It needs to be considered whether the quantum of subsidy need to be increased in view of the backwardness of agriculture and high percentage of tribals in the region.

It has been noted that only 86% of the total land demarcated as first priority area have been covered. As the major impediment to the speedy execution of soil conservation works in this area is finance and in view of the severity of the erosion problem in the catchment areas, it is highly necessary that sufficient funds are made available on priority basis so as to complete the works as expeditiously as possible.

Small Farmer's Development Agency, Kannur

Introduction

The SPDA programme initiated during the Fourth Plan period has been in operation in selected districts all over the country with varying degree of success. The task of identifying potentially viable small farmers, drawing up and implementing suitable schemes for augmenting their income from agriculture and subsidiary occupation naturally calls for highly intensified extension activity as well as effective co-operation from financing agencies in the area of operation of the project. These projects were to function for a period of five years subject to the financial outlines indicated for each project. The area of an SFDA project is generally a district and it is expected to benefit nearly 50,000 small farmers. The SPDA will assist the small farmer by extending 25% subsidy for programmes for irrigation, land levelling, improved agricultural implements, introduction of high yielding varieties, storage and marketing facilities etc. As regards subsidiary occupations he will have to be assisted by suitable ancillary schemes like dairy, poultry, fishery, piggery, sheep rearing and horticultural operations for which also it provides the same rate of subsidy.

For the implementation of the various programmes for small farmers a separate executive agency has been constituted in each project area as a society registered under the Registration of Societies Act. It is called the 'Small Farmers Development Agency' and is provided with special funds and separate staff at its disposal. The main functions are:

(i) to identify the small farmers and their problems in its area.

(ii) to draw up model plans for investment and production.

[iii] to execute these plans for the benefit of the small farmers either directly or through others in co-ordination with the existing agencies engaged in this direction in the field, whether private, public or co-operative such as the Zilla parishad, the Agro-Industries Corporation, Co-operative Banks, Commercial Banks, Departments of the State and Central Governments etc.

The role of the agency will be that of a catalyst in promoting the economic interest of the participants.

The Project Report for SFDA, Kannur was prepared for the four year period 1970-71 to 1973-74. The Agency started functioning only in 1971-72. It has completed five years of its working by March 1976 and has incurred an expenditure of Rs. 146.68 lakhs.

During the period the Agency identified 60,082 small farmers, 48,314 marginal farmers and 11,236 agricultural labourers. A total number of 57,616 persons were additionally enrolled as members of Co-operative societies. With the help of this Agency, development credit was made available to participants through financing institutions. This amounted to Rs. 178.68 lakhs as short term credit, Rs. 323.76 lakhs as medium term credit and Rs. 28.26 lakhs as long term credit in the district during the five year period.

Objectives

To ascertain the nature and quantum of benefits that accrued to small farmers in the matter of generation of income, employment and assets, all of which help to make them economically viable. An attempt was also made to assess the role of co-operative institutions in the working of SFDA in that district and the share of the small farmers in the operations of selected primary societies. The main purpose of the study was to evaluate the functioning of the Small Farmers Development Agency, Kannur against the objectives laid down for its working.

Methodology

The study covered all the twelve Community Development Blocks in Kannur district. Altogether 300 beneficiaries and 120 non-beneficiaries were selected for the purpose of the study. In addition twelve primary co-operative societies were selected for assessing their role in the development of small farmers in their respective area of operation. The Selection of beneficiaries, non-beneficiaries and co-operative societies was done at random. The field work of the study was done during three months from January 1975.

Findings

Among the beneficiaries 22% did not satisfy even the area criterion adopted. In the case of 3% the small farmers were found to possess only less than the minimum stipulated area while in the case of 19% the area was found to be more.

On the average the beneficiary farmers appeared to have earned higher income (Rs. 3447 per household) as compared to the non-beneficiary farmers (Rs. 2580 per household). Nearly 91% of the beneficiary small farmers reported to have increased their income after availing assistance from the agency the average increase in net income being 77% after participating in the programme.

Nearly 55% of the beneficiary farmers reported increase in employment as a result of their participation in the SFDA programme, especially activities connected with pumpset irrigation and maintenance of dairy animals.

Among the beneficiary farmers 83% reported increase in their assets mainly due to acquisition of assets under the SFDA programme, for 78% of whom the addition of assets valued at more than Rs. 1000.

Suggestions

In order to identify the small farmers it is necessary to prepare a comprehensive farm plan taking into consideration the farmer's capabilities and attitudes and judging whether they can be made viable with the help of the schemes sponsored by the agency. The identifying officers have to devote more attention in judging the viability status of them so as to make the different schemes sponsored by the Agency really effective.

The role of Village Extension Officers was found to be very important not only as a source of information regarding SFDA programmes, but also as an agent for establishing contacts and availing assistance from the agency. One of the serious bottlenecks which the Agency had to face has always been that the full compliment of Village Extension Officers was never in position during any of the years of its existence. For effective functioning of the programme, the full complement of extension staff has to be kept in position.

In the absence of a well organised marketing system, the small farmers are put to considerable difficulties in the disposal of milk produced and the realisation of dues from customers. The working of the Kannur Milk Supply Union leaves much to be desired and efforts made so far to revamp the Union have not proved successful. As the Kannur pasteurisation plant with a daily rated capacity of 10,000 litres of milk is nearing completion, the role of the Milk Supply Union vis-a-vis the pasteurisation plant has to be clearly defined.

Since co-operative sector accounts for more than 80% of the medium term loans under the SFDA programme, it is necessary that the recipients of such loans are given preference in the matter of short term loans channeled through co-operatives.

Introduction

The scheme for reclamation of Kayal lands for coconut cultivation is considered instructive for three reasons. First, the objective of this scheme is to give impetus to private individuals to undertake reclamation of privately owned lands which are marshy or submerged under water in the shallow extensions of permanent lakes and as such, it unfolds the immense potentialities of development of reclaimed land. Secondly, it represents an attempt to demonstrate that the use of institutional credit advanced for productive investment under supervised conditions involves no more than a bankable risk. Thirdly, it unravels the snags and constraints which hold up the progress of an apparently simple exercise. Kayal reclamation is not a new venture for Kerala, which excels in the capacity for pioneering work and hard labour provided the rewards are sufficient to induce them. But what is new in the present scheme is the intervention of an external agency and the discipline of institutional credit.

The scheme for reclamation of 500 acres of Kayal in Kollam and Alleppey districts for coconut cultivation involving a financial outlay of Rs. 28 lakhs was taken up for implementation by the Primary Land Mortgage banks at Kollam and Alleppey. It envisages issuing of long term loans to cultivators for reclamation of Kayal lands (water ranging upto 4 ft depth) and bring such reclaimed lands under coconut cultivation.

Objectives

- i. to assess the extent of utilisation of loans provided and its impact.
- ii. to find out the technical financial and administrative bottlenecks in proper implementation and
- iii. to list out the suggestions for salvaging the investment already made in the project.

Methodology

Quantitative and qualitative information for the study were obtained from various sources such as Central Land Mortgage Bank concerned primary Land Mortgage Banks. Departments of Agriculture and co-operation, the beneficiaries of the scheme and knowledgeable persons from the locality. Beneficiaries were first divided into five categories on the basis of the number of instalments of loans taken.. A 10% sample was taken at random from the above list of loanees from alleppey and Kollam districts as on 6/1976. The scheme was first started in Kollam and hence more representation in the sample.

Findings

10% of the beneficiaries in Kollam have availed of all the instalments of loan as against none in alleppey. The rapid fall in the number of beneficiaries not taking further instalments of the remaining part of the loan amount may be mainly due to the reasons that they were unable to produce the utilisation certificate in respect of the instalments already availed. The absence of proper follow up action and supervision leads to misutilisation of loans.

It is noted that the loan sanctioned constitute nearly 69% of the amount applied for. It is estimated that the cost for reclamations of land, planting and maintenance of the coconut trees upto 5th year is to be at the rate of Rs. 6500 per acre. It has been found that the actual cost far exceeded this amount. It is further noted that in both the districts, a larger percentage of cost of reclamation was met from loan funds (59% and 70.7% respectively in Kollam and Alleppey). It is interesting to note that 17.9% of the loans in Kollam have been diverted for other purposes.

The performance of physical achievements in Alleppey was relatively poor. None of the sample beneficiaries in the lowest size of holding is reported to have even raised a single round for subsequent operations.

There had been considerable escalation of costs by the time scheme was actually implemented. During the span of four years between starting of the scheme and closing of the scheme an increase of cost to the tune of 20% was reported. This was on account of escalation in the cost of labour and materials in both the districts.

The loan will be advanced on the basis of presumptive value of land. Most of the plots remain unreclaimed (even after a period of four years) their presumptive value do not serve any useful purpose of security for the loan. Further it makes revenue recovery measures impossible from such of the borrowers from whom the amount has to be recomped.

Field observations in Alleppey have shown that in some of the plots selected for the implementation, the depth of water was considerably more even during summer months. The cost of raising mounds thus exceeded the estimates. This has not been possible as most of the beneficiaries are small and marginal farmers.

The Land Mortgage Banks which financed the scheme did not have any control over the officers for the implementation of the scheme. The present system of monitoring does not seem to be satisfactory because of the ineffective control over the implementing banks.

The role of the PLMB is often misconceived. As a commercial institution it is naturally interested in expanding the volume of productive investment.

One of the reasons for the failure of the scheme in Alleppey district is lack of local organisation and unhealthy leadership which often misguided the poor beneficiaries. Unlike several other agricultural development schemes, this scheme under review is purely a loan scheme as no subsidy or grant is involved. The borrower as well as the lender should know that there is a cost involved and that the amount has to be repaid with interest on terms stipulated in the contract. This realization is lacking often either through ignorance or negligence. As a result the loanee is not eager to complete the work speedily and hence debt burden gets accumulated.

Suggestions

1. Cost estimates should be made on the basis of local verification by the bank officials instead of adopting a uniform rate.

2. More than the presumptive value of land offered as security the real guarantee for loan should be the personal security of the borrower. Therefore care should be taken to identify persons with genuine interest in cultivation as recipients of loans.

3. The procedural delays in the processing of loan application from the cultivators may be reduced and a time limit prescribed for disposing of loan applications.

4. Completion reports should be made mandatory at every stage of progress of the work.

5. Though the work is executed under the technical guidance of the Agriculture Department, the D.A.O. does not appear to have any involvement in the actual working. To ensure proper supervision, test checks of field supervision may be made by the D.A.O. to the extent of atleast 3% of the loanees.

6. The procedural safeguards regarding the submission of utilisation certificate for funds received should be strictly enforced before the disbursement of subsequent instalments

7. Targets may be fixed for checking utilisation by different categories of officers.

8. If an outer bund of Arattupuzha Kayal in Vattachal area (Alleppey) is constructed at Government cost, the cost of land reclamation to the loanees would have considerably reduced. The only way to salvage this scheme even at this stage is to couple it with some other Government assisted land development projects.

Intensive Paddy Development (Yela) Programme

Introduction

In the Fourth Plan, the new approach envisaged is for organising paddy production with the yela or padasekharam as the basic unit for planning and implementation of the production programme.

All the ryots in the yela will act jointly in the procurement and timely application of inputs and in the adoption of other improved cultivation practices. The State on its part will provide the necessary assistance and legislative safeguards in the organisation of the farmers and smooth functioning of the programme. It is expected that the new yela production programme will bring about at least 100 per cent increase in the yield per acre of paddy in the areas covered.

The yela production programme launched towards the middle of 1971 was envisaged as an improvement on the package programme implemented in the districts of Alleppey and Palghat which was discontinued. According to the new scheme all the farmers in the yela are supposed to act jointly in the procurement and timely application of inputs as well as the adoption of improved farm practices. The scheme aimed at securing the advantages of large scale operation thereby facilitating the rapid and integrated development of the agricultural sector in the State. The programme also visualised the mechanisation of agricultural operations to certain extent. The evaluation study conducted in 1970 on the working of Andoorkonam yela where the farmers organised themselves for collective operation may be considered the pioneer and the proto-type of the yela project. The strategy envisaged during the Fifth Five Year Plan has been

- (1) maximising the gross area under rice from existing net area through multiple cropping and
- (2) intensive cultivation of the stock of land available by adopting new technology on a differential or graded basis. The first series of 40 I.P.D units started functioning in 1971-72. The main objective of the programme is to maximise the per hectare yield and income of the cultivators in the units.

Objectives

The study on Intensive Paddy Development Units seeks the extent to which the proclaimed objectives of the programme have been achieved, to locate bottlenecks if any and to suggest measures for the improvement on the working of the scheme.

Methodology

The study covers all districts of the State. Eleven I.P.D. units, one in each district have been selected at random from the list of 70 units started during 1971-72 and 1972-73 which was considered as the sampling frame.

From each selected yeal, 60 cultivators were selected for detailed enquiry. In addition 15 cultivators from yeas adjacent to each yeal were selected on a purposive basis as owners of control plots. The reference period of the survey was the agricultural year 1974-75. The study was conducted during Oct. 74 to August 75.

Findings

The details collected from the IPD units showed that 61.7% of the area under paddy had been brought under HYV strains the highest percentage was 82.4 for the Muandakan season. There was cent per cent coverage of HYV in only one of the selected unit and it was as low as 15.8 in some other units. The percentage of area under HYV was found to be more among the beneficiaries (68.7%) than among the non-beneficiaries (44.1%). More significant is that the percentage of area under HYV was found to be nearly double among the beneficiaries whose main source of income is agriculture (70.2%) as compared to their counterparts outside the yeal.

The criteria of contiguity originally intended in the selection of IPD units, seemed to have been sacrificed due to extraneous considerations. In many cases; several fragments, with diverse physio-climatic conditions have been constituted just to start a unit with the result many of the units could not fulfill the objectives of technical efficiency and economic of scale

The major strategy of uniform cultural practices included in the yeal development programme, had not been ensured in most of the yeals. The diversity in the nature of land and fragmentation or lack of co operation among the cultivators were the main hurdles responsible for the failure to adopt uniform operations.

Suggestions

The objective of modernisation of agriculture such as distribution of quality seeds, optimum use of fertilisers, adoption of improved implements, systematic plant protection and water management had been achieved to some extent in yeals which had a record of successful performance in respect of availability of inputs. Credit also formed an important infrastructure. The existence of the yeal and the extension activities of the agricultural personnel assume greater importance in times of scarcity of inputs. The Department of Agriculture may evolve a machinery, in consultation with the yeal committee for the adoption of package of practices and for the procurement of different inputs. A group guarantee system may also be experimented to satisfy the credit requirements of the cultivators in the whole yeal.

Raising of common nursery was visualised as the very basis for ensuring uniform variety of seeds and common pursuit of all subsequent activities. Practical difficulties had led to the scaling down of targets in almost all units. The Community Nursery Programme, which offered attractive subsidy did not get much response from the cultivation. Hence a realistic cultivation plan for the entire yela may be drawn up and the demand for seedlings assessed accurately for each season.

The performance of most of the units was not upto expectation, mainly due to lack of adequate irrigation facilities. Cultivation was adversely affected by the shortage or untimely execution of M.I. works. Required funds for the renovation or improvement of the existing M.I. works and for the construction of new works, may be placed at the disposal of every unit, as and when a unit is sanctioned. Proper co-ordination of the concerned departments, particularly M.I. Department may also be ensured.

Though the programme was started as a specialised project for paddy cultivation, it has to be viewed as part of an integrated area development programme. The Community Development pattern of rural development failed to attain self sustained growth. In the context of multiple cropping pattern existing and with the outlook in planning from grass root level, with the proposed constitution of the District Planning Machinery, effective co-ordination within the district, for this integrated approach can be ensured.

The yela committee should be made fully representative of the farmers by having truly elected members in the committee. The present advisory nature of the yela committee constituted can be modified by vesting it with statutory powers.

Evaluation Series-31

Applied Nutrition Programme in Kerala

Introduction

Malnutrition or under nutrition is a curse of under developed countries. Deficiency in the Nutrition level leads to low vitality and output. The level of calorie intake for Keralites is 1842, far below the recommended level of 2400 calories per person per day.

The worst affected by this menace is pregnant women, lactating mothers and pre-school children. The UNICEF, FAO & WHO co-operated with Government of India to evolve and implement a programme to fight against mal nutrition and under nutrition. The programme envisages ways and means to assist the villagers in raising their economic status, thereby increasing their purchasing power and providing them with nutrient food. The programme also includes nutrition education, and training in production, preservation and consumption of nutritionally valuable foods.

Methodology

For evaluating the progress and efficacy of the programme a sample of 11 C.D. Blocks were selected one from each district, out of 74 C.D. Blocks where ANP was implemented till 1975-76. Again, one A.N.P. Panchayat was selected from among each of the 11 Blocks. a total number of 20 households were selected from each of the selected panchayat for detailed enquiry. One feeding centre was also selected at random for detailed study.

Observations

(i) Selection of beneficiaries

The turnout of women and children at the feeding centres was below the targetted number and so the Medical Officer was constrained to select all of them. The labour class especially the S.C. and S.T. people were not well aware of the opening of the feeding centres. The actual number of beneficiaries who attended feeding centres was less than the number recorded in the Register.

ii) Role of the Mahila Samajams

The remuneration given to the selected convener is meagre, compared to the responsibility involved in keeping the stock of food and other materials, cooking and distribution of feeding materials.

iii) Feeding Materials

The programme envisaged the supply of eggs, milk, leafy vegetables etc. to the beneficiaries in addition to the 'care' feeding materials, But this was not adhered to.

(iv) *Interruption in the Feeding Programme*

There were cases of interruption of feeding due to problems of transportation of feeding materials in time.

v) *Nutrition Education*

One of the key objectives of the A.N.P. is to educate the people on the nutritional aspect of the diet. To make this objective a reality, cooking demonstration, exhibitions, film shows etc. are to be conducted. The targetted number of camps were achieved, though the duration of a 'day' was too insufficient to impart all the relevant vital information. Also, follow-up action could not be effected through periodical house visits to the trainees.

Suggestions

- 1) The Lady Village Extension Officers are responsible for the conduct of feeding, production and nutrition education programmes. The work in respect of ANP may be made the duty of the Villagae Extension Officers also.
- 2) The full complement of staff is to be posted in the Block.
- 3) The camps conducted to impart training to house-wives may be extended to one more day as it involves a variety of subjects such as deficiency diseases, weaning diets, cooking demonstrations etc.
- 4) The nutrition education is imparted only to female members of the households whereas it is difficult to put it into practice unless the male members also co-operate. Therefore the male members may also be brought under the purview of the training programme.
- 5) The scheme for the cultivation of vegetables may be made more effective by supplying good quality seeds and better follow-up and enthusiasm by the implementing agency.
- 6) The feeding material are supplied free of cost by International Agencies. Effort should be made to supplement and substitute the present feeding materials.
- 7) The ANP may be co-ordinated with analogous programmes by other departments. This will result in economy of operating costs.
- 8) The allowance of Rs. 10 per month to Conveners of Mahilasa-majams may be enhanced to a reasonable level as an incentive to their efficiency.
- 9) The Medical Staff could contribute more at the level of educating the rural people about nutritional value of food.

Soil Conservation Programme in Waterlogged Areas

The objective of the soil Conservation Schemes in water logged areas is to protect the lands from the possibilities of inundation so as to stabilise the existing crop and raise additional crops. These schemes play a pivotal role in boosting the agricultural production of the state. In the present outlay the economic viability of soil conservation schemes was assessed by adopting benefit cost analysis. The main item of Soil Conservation work undertaken is the construction of permanent bunds. The four schemes taken up for study are the following.

1. Manalurthazhoom Soil Conservation Programme
2. Chalady-pazhamkole Programme
3. Kakkanad Kariland
4. Thollayiram padasekharam Programme

The reference period of the study was the year 1973-74.

Summary of Findings

1. Yield rate

The productivity of the crop raised in the scheme area was found to be on the increase. This phenomena is attributable to favourable seasonal changes, adoption of modern cultural practices, improved inputs and better irrigation facilities.

2. Additional Areas

The cultivable area had been doubled in Manalurthazhom, and had shown a marginal increase in Kakkanadkari. There was considerable increase in gross area in the project areas of Manalurthazhom, Chalady-Puhamkole and Kakkanad Kari. This was due to stabilisation of the second crop. These favourable changes in terms of cultivable area and gross area under cultivation were due to the soil conservation measures.

3. Annual net income

The annual net income per hectare registered an increase of 3 to 6 times in the scheme areas except Thollayiram. In thollayiram, even without raising additional crop a 68% increase was noted during the first year and it rose to 3 fold in the second year adfter the completion of the scheme.

4. Employment Generation

The construction of bunds and the raising of additional crop contributed much to the generation of employment.

5. Flood control and burb on Intrusion of Saline Water

The periodical occurence of floods was almost controlled thereby diminishing the chance for crop failures. Also it was possible to burb the inntrusion of saline sea water into the paddy fields.

6. Benefit-cost ratio

The benefit-cost ratio varied from 1.6. to 4.2 thereby showing that all the schemes are economically viable.

General Observations & Recommendations

1. Maintenance and Repair

The cultivators of the scheme are of the view that the cost of maintenance and repairs should be borne by the Government. So the concerned departments should convince the cultivators that it is their duty to maintain the bunds.

2. Recovery of Loan

The revenue department is responsible for the recovery of the loan.. In certain cases the beneficiaries are ignorant about the liability thrust upon them.. The beneficiaries should be made aware of the payment of dues.

Working of the Central outright Grant/Subsidy Scheme for Industrial Units in Backward Districts

Introduction

The problem of unemployment has soared to alarming proportions in Kerala. The educated unemployed man power can be well utilised for the building and structuring of the economy of the state. Quick industrialisation only can alleviate the problem of unemployment. To attract more industrialists to the backward areas, the Government have launched the Central outright Grant/subsidy scheme for Industrial units in Backward Districts. At the initial stage the subsidy was 10%.

Afterwards in 1973 the subsidy was enhanced to 15% to attract more and more industrialists to the backward areas. The three districts of Alleppey, Malappuram and Kannur have been declared as the most backward. Industries set up in these districts are eligible for the Central subsidy.

Objectives

The main objectives of the study is to assess the impact of the subsidy scheme on the industrial development of the most backward districts viz., Alleppey, Malappuram and Kannur. The study probes into the following points (1) Have the areas attracted more entrepreneurs on account of the scheme (ii) has the growth been commensurate with the investments consequent on the implementation of the scheme.

Methodology

The data needed for the subsidy were collected by mailed questionnaires and personal interviews. The reference period of the study was the year 1972-76 and the survey was conducted during the period from Nov.1976 to April 1977.

Findings

In order to have an idea of the rate of industrialisation in the the backward areas the following aspects were studied.

(i) Annual increase in the number of industrial units (ii) Annual increase in the number of beneficiary units (iii) Percentage of beneficiary units to the total number of existing units (yearwise)

(i)Rate of Industrialisation in the Backward Districts

Calculating the growth index for the year 1977-78 based on 1973-74 it was found that this index is 168 for the three districts of Alleppey, Malappuram and Kannur. This is close to the State growth index which is 169.

(ii) Response to the Central subsidy scheme:

The growth index for 1973-78 in respect of the units that had availed the subsidy for the three districts taken together is 435. The percentage of units that had availed of the Central subsidy rose to 27.8 in 1977-78 from a mere 10.7 in 1973-74.

(iii) Progress in the Disbursement of subsidy

The total amount of subsidy disbursed as at the end of March 1978 is to the tune of Rs. 2.78 crores. A total of 887 industrial units were benefitted

in the three districts. Alleppey district ranked first in the case of percentage of beneficiary units and percentage of total subsidy availed.

Suggestions

1) Effective Extension

Only 28% of the small industrial units were able to utilise the 'subsidy scheme' till 1977-78. The reasons for not availing of the subsidy may be varied in nature, from unwillingness to lack of information. Hence the necessity of more extension work is felt.

2) Infrastructural and organisational support

The reasons for the low intake of subsidy may be due to the common problems that irritate an industrialist such as inadequate infrastructure, procedural delays and market outlet. The 15% subsidy is not appealing when compared to the insurmountable bottlenecks. Hence more attention is to be paid to overcome these problems. Also the industrialist is to be provided with sales tax, excise duty and income tax exemptions as a positive incentive. The main input the industrialist wants is credit. The entrepreneurs may be extended liberal credit to set up industries in the backward districts.

3. Streamlining of procedure

The formalities connected with the valuation of land, building and other assets and liabilities for submission of duly certified accounts cause undue delay in the processing of applications at various levels. The district authorities are not empowered to sanction the subsidy to eligible units. If the powers were decentralised to the district level, much time would have been saved. A concerted efforts by the Industries department is also warranted for the popularisation of the scheme. There is also procedural delay at the State Level to get the reimbursement of the subsidy amount from the Central Government.

4. Ensuring follow-up programme and proper information system

Lack of effective follow-up and information system compels atleast a few beneficiaries to close down the units before the stipulated period of 5 years. Hence the Information system need be streamlined. The beneficiary should report the progress to the industries department at least for a period of 5 years. The Information system in the department should be equipped to collect all the vital information regarding the industrial units in the districts. In the absence of such data it is difficult to ascertain the impact of the subsidy scheme.

5.

A discriminating rate of subsidy

The top 50% with large capital investment was the most benefitted of the Central Subsidy Scheme. Though the largest units show economic efficiency as compared to smaller units, the volume of labour absorption and less capital intensive nature of the smaller units made them more deserving for the Central subsidy. Hence it is suggested small industries with less than Rs. 1 lakh capital investment may be given a higher rate of subsidy. A higher rate of subsidy, say 25%, is justifiable in the context of escalating costs and the social objectives of eradication of unemployment and equitable distribution of oppoortunities.

6. An Alternative to capital subsidy

The purpose of subsidy on capital is to balance the disadvantage of infrastructure so that the cost of production may be reduced. But the purposae is defeated by setting up capital intensive units which have a low level of labour absorption. Hence capital subsidy may be replaced by selective subsidy based on employment content, value of raw mataerials used or transportation cost. This will promote viable small rural industrial units on a decentralised basis.

Merit-cum-Means Scholarships

Introduction

Kerala has been the pioneer in the field of educational development in India. In literacy, enrolment ratio, number of institutions, percapita expenditure on education etc., Kerala is in the forefront. During the previous three plan periods much quantitative expansion has taken place. A large number of scholarships and fellowships are instituted by the Central and State Governments to encourage promising students to go forward with their higher education. The Merit-cum-Means Scholarship is one of these categories. The idea behind this is that no brilliant student be denied the privilege of higher education simply on the reason that he is poor. The scholarship are given based on the excellence in the qualifying examination and the parental income.

The various types of scholarships are listed below:

1. Government of India Scholarships
 - a) National Loan Scholarships
 - b) National Merit Scholarships
 - c) Merit Scholarships to the children of school teachers.
 - d) Hindi scholarships to the students of non-Hindi speaking areas.
 - e) Scholarships to the Physically Handicapped students.
2. Kerala Government Scholarships
 - a) State Merit Scholarships
 - b) Scholarships for the encouragement of Sanskrit education.
 - c) Scholarships for the proficiency in sports.
 - d) Scholarships to the students of Music colleges.
 - e) Scholarships to the students of RLV Academy of fine arts.
 - f) Cultural scholarships.

Objectives

The main objective of the study is to assess the benefits accrued to the beneficiaries of the Merit-cum Means scholarships scheme and whether the benefits had percolated to the deserving student population. It is intended to establish more rational criteria for deciding the eligibility for scholarships. The study looks into the adequacy of the number of scholarships and the income-bar. The functioning of the schemes, bottlenecks in implementation, sufficiency of the amount of scholarship, students opinion and reaction towards the scheme are also made the aspects of the study.

Methodology

Basic information for the study were collected from the Directorate of Collegiate Education, Public Instruction, and Technical Education, Supplementary data have been collected from selected Educational Institutions and beneficiary students. A total of 17 institutions were selected from one each from Arts/Science Colleges of the 11 Revenue districts and one each from the category of Teachers' Training Colleges, Law Colleges, Engineering Colleges, Medical Colleges, Agriculture and Veterinary Colleges. From each of the institutions a 10% of the beneficiaries subject to a minimum of 10 were selected. The reference period of the study was the year 1973-78.

Findings

1. It was found that the number of scholarships awarded was less than 25% of the eligible candidates taking the number of applications received as the indicator of eligibility.
2. A majority of the awardees of scholarships could not have pursued their studies but for the scholarships.
3. extension of the dates for the submission of applications for different types of scholarships is the main reason for the time-lag in sanctioning scholarships and its disbursement.
4. Finely sanctioning and disbursement of scholarships become difficult owing to the delay in publishing of rank lists.
5. The majority of the beneficiaries were satisfied with the rules and procedures followed for the grant of the merit-cum-means scholarships.
6. The benefits of the merit-cum-means scholarships could not reach all the deserving sections of the student population as the number of scholarships to be awarded in a year is fixed.
7. Many of the brilliant students do not come under the purview of the scheme as there is the income ceiling.
8. The scholarships were awarded to students who got 65% or more marks though the eligibility criterion was a minimum of 50% or 60% in the qualifying examination. So it is self evident that a great many of the students were denied of the scholarships because of inadequacy of funds
9. the awardees are tempted by more attractive type of scholarships and this change-over results in much inconvenience to the administration in disbursing the scholarships.
10. There was considerable time lag between submission of application forms and sanctioning and disbursement of scholarships.
11. The amount of scholarship is inadequate and an upward revision is warranted. .

Suggestions

1. Necessity to increase the number of scholarships

Several of the aspirants for the scholarships do not get it because of paucity of funds though they fall within the eligible class. Hence the number of scholarships is to be enhanced to accommodate all the deserving students.

2. Raising the ceiling of parental income

The parental income ceilings have been fixed years back. With the passage of time money value has decreased and this is to be taken into account while revising the scholarship amount as well as the parental income-tax. It is suggested that a uniform ceiling be fixed for the different types of merit-cummeans scholarships

3. Enhancing the rate of scholarships

In the light of the cost escalation in all spheres of life the cost of education has also soared high. Therefore the Government may revise the rates suitably. Then only the benefits intended will percolate to the desired level to the desired sectors of society.

4. Candidates from Educationally Backward Areas deserve special consideration.

For the rural students the environment where they live is not encouraging to study. So the chances of getting a scholarship to him is dim. Such social handicaps are to be compensated to by special consideration.

5. Removal of time-lags in sanctioning and disbursement of scholarships.

There is a considerable lapse of time in between the submission of applications and disbursement of scholarship amounts. The reasons may be varied in nature from late publication of results to delay in sanctioning of funds. This can be overcome by fixing strict time schedule at all levels. A delay in the allotment of funds by Central Government can be compensated by timely intervention by state Government. If the application for different types of scholarships are invited simultaneously and a uniform rate of scholarship is followed, the tendency of the students to change over to more covetable type of scholarships can be stopped to some extent.

Scheme for Raising of Cashew Plantations in Private Sector:

Introduction

Though Kerala enjoys monopoly in the export of cashew kernel, it depends heavily on the import of raw-cashewnuts from the African Countries. The Production of Cashewnuts has diminished to a staggering level over the years even after a substantial increase in area under cashew. The reason may be attributed to low productivity.

Of late the import of raw nuts had fallen short due to the emergence of tough competition in the international market. Our export contribution decreased to 55% in 1977 from a peak level of 95% in 1966. This has necessitated indigenous production of cashewnuts to meet entire external demand. Promotion of cultivation of cashew in the state was the answer to entangle the problem of scarcity of raw nuts. Kerala Government has introduced the scheme for cashew plantation in private sector against this background.

A scheme for encouraging the farmers to take to the cultivation of cashew was chalked out in 1972-73. The target was modest only to the extent of 5000 acres in the Kasaragod and Hosdurg taluks of erstwhile Kannur district. The scheme later extended to the districts of Malappuram, Thrissur, Palakkad and Kozhikode. during 1976-'77 the scheme was categorised as a centrally sponsored scheme and it continues as such. The scheme envisages the free supply of quality planting materials and it continues as such. The scheme envisages the free supply of quality planting materials and cash subsidy to cultivators who take to cashew cultivation.

Objectives:

The overall objectives of the study was to assess the real impact of the incentives on the area under cashew. It is also attempted to study quality of the plantations apart from the physical aspect. The adequacy of the assistance given, the procedure difficulties, the extension support and the intensity of interest of cultivators were also made the subject of study. The selected beneficiary cultivators were contacted by investigators to collect the required details for the study. In addition to this discussions were held at the field level to get an insight into the problems of implementation.

The field survey has been carried out during the first half of 1978.

Findings

1) Economic Status of the Beneficiaries

About 96% of the beneficiary cultivators belonged to the category of small holders with plantations of two hectares or less. The area brought under cashew cultivation is not correlated to the economic status of the farmers. It is therefore suggested that the classification of beneficiary farmers should be on the basis of the total land owned by them and as far as possible due weightage should be given to the aggregated income of the farmers.

2) Conditions of the Plantations

According to the rules governing the scheme the eligibility of the cash subsidy is linked to the survival rate of not less than 75%. But in about 44% of the sample plots the survival rate is less than 75%. The High casualty rate is attributable to deficient rain, land terrain and attack of pests and diseases. Normally the land available for cashew cultivation is marginal lands. But the study revealed that area available for other crops like tapioca was used for cashew cultivation on account of the incentive offered and favourable price for cashewnuts. The

The cost of cultivation as revealed from the study is much less than the cost estimations by farm experts. So it is clear that the plantations are not well attended to by farmers. This neglect of plantations will defeat the object of increasing the production of cashew.

3) Incentives in the Scheme

The cultivators should be educated about the package of practices needed for the proper maintenance of the plants. Then only we can boost the production of cashew nuts. It is suggested that the subsidy may be offered in kind in the form of fertilisers to ensure proper use of the subsidy. Also the subsidy amount is small to meet the high costs of cultivation.

Suggestions

1) Staff and Extension Work

The field staff proposed in the original scheme was one Junior Agricultural Officer, two special grade demonstrators and eight second grade demonstrators for every unit of 1600 hectares in the first year of planting. In the second and third years of planting the second grade demonstrators can be reduced to half the number. In the actual implementation of the scheme this stipulation was not adhered to. In Kannur and Malappuram districts the staff position was much below the required level. So the existing field staff was overburdened and this has resulted in the poor quality of extension work by field staff.

2) Selection of Beneficiary Farmers

The system of selection of beneficiaries as revealed from an application form is not conducive to identify the genuinely interested cultivator. The present application form should be made comprehensive to include details such as total area under possession, main occupation, annual income, details of crops raised etc. The possibilities and prospect of cashew cultivation, the advantages of the scheme, the package of practices recommended etc. Ought to have been explained to the prospective cultivators. Even printed pamphlets incorporating the relevant details should have been supplied to the farmers.

3) Maintenance of registers.

Either the Cashew Development Officer or the Senior Agricultural Officer has not maintained the Registers with the essential details of beneficiaries. The registers if at all maintained have no uniformity and they lack in data relating to the bygone years.

4) Incentives under the scheme

Untimely and belated disbursement of the cash subsidy under the scheme does not help effective utilisation. The present method of determining the quantum of subsidy based on the area brought under cashew is not in conformity with the economic status of the cultivators. The categorisation of the farmers should be based on the total area under possession.

5) Plant Protection Measures

The Plant protection measures resorted to are not adequate. The various units in the scheme area do not have even the required number of sprayers. Spraying is needed only twice in a year and this can be arranged without difficulty if the activities of the IPD Units and the Cashew Plantation units are dovetailed. A Programme to spray the entire area may be chalked out and the cost of spraying may be realised from the beneficiary farmers.

Small

Introduction

By the introduction of the high yielding variety of seeds a major break through was brought about in the agricultural sector. But the advantage could be reaped only by the wealthy farmers as the technique was capital intensive. The small and marginal farmers who constitute the major chunk of the rural population was not benefitted by the rosy green revolution. The small farmers constrained by inadequate resources had to stick on to the conventional methods of farming. This has made the gap between the big farmers and small farmers wider. The policy makers were alarmed at seeing the lop-sided growth of the economy. A shift in emphasis was considered necessary by all. consequently a scheme was evolved to bring the small and marginal farmers too to the main stream of development. This was the background against which the small Farmers Development Agency was established. SFDA, Kollam was registered on 29.9.1972 where this study was conducted.

Objectives of SFDA

The primary objectives of SFDA is to make the potentially viable farmers viable by enabling them to earn more. This is sought to be achieved through modernisation and intensification of agriculture and evolving suitable subsidiary occupation. The SFDA projects are to be set up in areas where there is an adequate number of potentially viable small farmers. The SFDA will extend support to farmers in their programmes for irrigation, land improvement, acquisition of new agricultural implements, introduction of high yielding varieties of crops, application of other superior inputs, storage, marketing etc. by way of advising them to obtain credit from financial institutions and reimbursing 25% of the credit as subsidy from the Agency.

Methodology

Field survey was conducted to study the impact of the programme on the income and employment of the target group. Sample beneficiaries were selected from among all the 17 NES blocks by simple random sampling technique. Apart from this 100 non beneficiary sample was also selected from each of the NES blocks as control farmers. Field Survey was conducted during March-August 1978.

Findings

Community Irrigation Schemes

The community irrigation scheme have certainly increased the irrigation facilities but not been efficiently utilised in the absence of feeder canals and deficient organisational set up. The sharing of water among the beneficiaries was not properly regulated. Some of the scheme taken up were not economically viable, but they were socially necessary. Such schemes were protective scheme to prevent flood or drought and this has stabilised the crop.

2. Soil conservation

Most of the soil conservation works executed are contour bundeing. The impact of the scheme on small holdings is more pronounced than on large holdings. the increase in gross income in respect of holding size below 0.2 hectare was maximum.

3. Pumpsets

The scheme of pumpsets has been very attractive to the farmers in Kollam district. But the number of pumpsets allotted were not in conformity with the actual requirement. The Agency should have earmarked a larger amount for this scheme. The repayment of the loan within a period of 5 years after the receipt of the loan seems to be throwing the farmers into much difficulty. Provision for deepening the wells during summer season might have been included in the scheme to avoid the pumps lying idle during summer season due to lack of water.

4. Goat Units

The supply of goats was a popular scheme. But in about 20% of the cases the goats were not in possession of the beneficiaries. This shows lack of follow up action by the Block machinery. The scheme fetched profit but is meagre. The profit can be increased by supplying Alpine or Sanan breeds.

5. Dairy Units

The scheme is best suited to Kollam district. Since there was little scope for fodder cultivation in small size holdings the scheme does not invoke much enthusiasm among the small cultivators. Care was not taken to supply quality breeds. High cost of feeds was another discouraging factor. Another impediment was the absence of proper management practices and insufficient veterinary services. The field staff could not convince the farmers the use of artificial insemination. The low price for milk and the lack of marketing facilities also paved the path for failure of the scheme. Efforts are not seen taken to organise collective dairy farm which is the best strategy for the district.

6. Poultry units

Deep litter system of poultry rearing is not suited to Kerala. The Agency launched the scheme without proper planning and faced with inadequate infrastructure to meet with ultimate catastrophe. The backyard poultry system also did not thrive due to the damage it caused to the crops.

7. Supply of country crafts and Nets

This scheme was designed to help the fishermen of the district who constitute a significant part of the target group. The fishermen were able to increase their earnings.

Observations

1. The strategy of the Programme

The schemes as envisaged earlier consists of beneficiary oriented schemes. But a better impact would have been imparted if the programme were implemented as an area programme. Concentration of activities in selected areas as in an appropriate manner rather than spreading them thinly over a wider area could have helped development of common infrastructure and reduction of unit costs.

2. Identification of Beneficiaries

The staff entrusted with the task of identification of beneficiaries had not risen to the desired level. The norms fixed for the selection of beneficiaries were also lacking in clarity.

3. Machinery for implementation

The extension staff of the NES Blocks upon whom the responsibility to implement the scheme was imposed were not fully equipped to impart the necessary extension education.

4. Administrative Co-ordination

SFDA is the Agency to plan and organise the implementation of the programmes. The actual responsibility rests with other implementing departments. They have to play a dubious role as they have to implement their own programmes. Often the interests will clash resulting in utter neglect of the programme by departments.

5. The nature of schemes

The SFDA programmes are categorised as a two pronged programmes. Individual schemes coupled with community schemes are visualised in the programme. The former was implemented without the necessary spade work. The latter was implemented much below the expected level due to lack of co-operation among the beneficiaries and over fragmentation of holdings .

6. Complementary Activities

The schemes such as dairying and poultry keeping are capital intensive and risk involving these schemes will reduce under employment rather than creating employment opportunities. If viewed from a different angle these two schemes are income generating and thereby creating additional employment. If better farm management practices are followed the two schemes can be complementary to crop production.

7. Test of viability

A whole-farm approach rather than a scheme-wise approach is required to achieve the object of making the farmer economically viable. Such a wholefarm approach would be a better demonstration to others than the routine crop demonstration.

8. Credit

The SFDA funds are meant to be used by way of subsidy to the flow of credit from the financial institutions. But the objective of mobilising institutional credit was not fully realised because of the weakness of the co-operative structure and the too cautious approach of the commercial banks. The flow of institutional credit to the vulnerable sections of society is too meagre. The complex formalities involved in availing the institutional credit has kept the poor away from the purview of the scheme.

9. Need for new employment - oriented Programmes

The Agency could not do any thing towards the unemployed or under employed. For such people the Agency ought to have some definite programme for the development of their skills. Programmes for the development of cottage and rural industries can also be taken up by the Agency in places where there are concentration of such skills and facilities.

Anjengo fisheries Development Project

Introduction

The Anjengo Fisheries Development Project has a wide spectrum of integrated activities from fishing to marketing. The role of the State Government was that of a promoter. The state has provided the necessary organisational support and ensured assistance from financial institutions. In spite of the patronage by the State government the implementation of the Project met with failure. The project has gone awry due to the commissions and omissions of the administration responsible for it. This experiment shows how a good project may go without the desired results, if implemented in a wrong way.

Objectives of the Project

1. Increasing fish production by introducing modern methods of fisheries.
2. To link production with storage, processing and marketing.
3. To distribute fish to consumers at reasonable rates through retail stalls.
4. To provide workshop, landing facilities diesel etc. to the mechanised boats.
5. To establish storage plant, freezing plant and peeling sheds.
6. To provide common facilities for the supply of spare parts, implements and consumer goods and
7. To strengthen the base of co-operatives through which these activities are to be organised and implemented.

The project envisaged 45 mechanised boats with nets and implements, an ice-cum fish storage plant one freezing plant, a workshop, landing facilities, two peeling sheds, two retail stalls, a net making hall, an insulated van and two scooter vans at a revised estimated cost of Rs. 78.80 lakhs. The finance for the scheme comes from the Agricultural Refinance and Development Corporation and the State Government. The project was proposed to be implemented through the Thiruvananthapuram North Region Fish Marketing Co-operative Society over a period of three years from 1974-75.

Findings

1. Mechanised Boats

The main component of the project was the construction of 45 mechanised boats and allotting them to groups of bonafide fishermen. Only 30 boats have been physically released by the manufacturer though the records showed that all the 45 were released. The hulls of the boats were made of substandard materials. This necessitated major repairs to boats when operated on sea waters. The performance of the engines was not satisfactory due to low acceleration and low pulling power. Most of the boats were out of order and the crew members were forced to remain idle for long periods. Finally they abandoned the boats in despair.

2. Fishing Nets

The fishing nets were purchased from the Kerala Fisheries Corporation. But the nets were found unsuitable at the operational level. So the nets were modified incurring additional expenditure. The scheme envisaged only 45 each of nylon and cotton nets whereas the actual purchase was 50 each.

3. Workshop

The workshop was to be completed during the first years of the project duration to cope with the needs of repairing of the boats. But when completed it was in a place with no access by road or water and no power connection.

This unsuited location of the workshop has defeated the very purpose of it.

4. Jetties

The construction of two jetties at the workshop area was not pragmatic as there was no access to the workshop. The construction of the jetties necessitated an additional expenditure of Rs. 500 per month by way of rent/to the owner of the hinterland. Later it was found that the jetties are of no use and it was dismantled to unravel the foolishness of the decision in the construction of the jetties.

5. Freezing Plant

The freezing plant could not be installed and commissioned as the construction of the building was not completed. The freezing plant is not likely to be profitable as the prawn catches by the society. Boats are insufficient to make the freezing plant viable.

6. Ice-cum fish storage plant

The proposal was to establish an ice plant of ten tonnes capacity with storage capacity of 20 tonnes and fish storage capacity of 10 tonnes. The financing bank with held payment of Rs. 70000/- of a consignment of machinery, so the firm has not started the erection work. As a result the machinery purchased and the building remained idle. The ice plant was the major revenue earning item of the Anjengo Scheme and this caused a considerable drain of revenue.

7. Peeling sheds

The peeling sheds was contemplated for processing prawns obtained through the operation of the fishing boats. The two peeling sheds were completed.

But the minimum arrangements were not ensured. The peeling sheds could not be utilised so far because of the insufficient catches of the prawn and the non-commissioning of ice plant and cold storage.

8. The Insulated Van

The insulated van was ready for operation by early 1977. But the catches by fishing boats were sold in auction at the landing site itself for want of processing facilities. The relevance of acquiring an insulated van at this juncture cannot be justified. Later it was decided to lease out the vehicle on a monthly rental of Rs. 4101

9. Retail stalls

Two stalls were to be opened one at Kottarakkara and the other at Punalur. A tempo Van was purchased well in advance for the transportation of fish from the landing sites to the stalls. This van was later used for the travel of officials.

10. Oil Bunk

The proposal was to set up an oil bunk at Neendakara. A site was fixed up and no further action on this was taken.

11. Distribution store and Net Making Hall

The store was intended for distributing fishing equipments, spare parts and other accessories to the fishermen of Anjengo region. The net making hall was well conceived as the Marketing society had the necessary expertise.

But due to the financial crisis both the scheme showed no progress.

Suggestions

1. Defects in formulation of the project

Before initiating the project the working of identical projects should have been evaluated thoroughly . Had this been done similar errors would not have been committed.

2.Lack of well defined objectives

The project report does not clearly spell out the objectives. What has been spelled out as objectives were only narration of the activities included in the programme.

3. Location of the Project

The project visualises the development of the fishing industry of Anjengo region. But the fishing operations were actually carried out at Neendakara. Even without landing facilities the boats could have operated from Anjengo. The catches could be transferred to country canoes and brought to shore.

4. Lack of pre-project extension

Before implementing the project the attitude and aspirations of the people of the area was not properly assessed. The co-operation of the target group is essential for the successful implementation of any programme. The potential beneficiaries should be convinced of the proposed technology, the terms and conditions, the benefits and the responsibilities involved to ensure maximum participation.

5. Technical Deficiency

Instead of going for sophisticated and expensive techniques a judicious combination of semi improved and improved techniques suitable to the project area and the people therein should have been conceived. In the choice of technology we should aim at extending the benefits to the maximum number of people. So it is suggested that instead of 45 mechanised boats of uniform size designed for one mode of fishing the project could have planned for a combination of mechanised and traditional crafts adopting different modes of fishing.

6. Managerial Inefficiency

The managerial inefficiency of the Project Officer has ruined the project. This is reflected in the various activities like acquisition of boats, insulated and tempo van the construction of jetties, work-shop, peeling sheds and cold storage.

7. Lack of co-ordination of Activities.

There was lack of co-ordination in the implementation of various activities so that certain activities to be preceded were actually implemented much late or not at all implemented. This has made the activities already completed also inert. There was unwarranted haste on the part of the administration to effect the purchases. Those who are responsible for the implementation definitely lack knowledge regarding interrelationships and the logical sequence of the various activities involved.

8. Failure to Benefit the Target Group

The initial flows with the boats have made the crew members disheartened and some of them have abandoned the boats. Though the crew members were selected from the project area they were forced to work at Neendakara due to the illogical decisions of the administration.

9. Burden of unproduction Debt.

The loan for the project was advanced by the District Co-operative bank. The preproject analysis showed the project generate sufficient surplus to repay the loan. But all hopes were too imaginative that the accumulated loss by the end of June 1979 was to the tune of Rs. 87 lakhs. As the boats are running below the viable level of operation chances of redeeming the project are bleak.

Production cum training centres and other training centres of the Harijan Welfare/Tribal Welfare Department

Introduction

The Scheduled Castes of Kerala are traditionally agricultural labourers. They also used to engage in occupations like, mat weaving, basket making etc. The Scheduled Tribes in the hill area usually live upon collection of forest produces. Agricultural labourers among SC/ST could get only seasonal employment, that too depending on rains and irrigation facilities. The wage income from agricultural labour has dwindled due to population pressure. In the hilly areas the S.T. also experienced restrictions to their age old way of life. The SC and ST people were forced to evolve a new style of life at variance with their traditional mode of life. The State Government introduced various schemes intended for the economic upliftment of these people. One of such schemes was to train them in popular cottage and village industries which is pivotal to the rural economy. A large number of training centres were started by the Department of Harijan Welfare for training the SC/ST people in important crafts like handloom weaving, carpentry, rattan works, cutting and tailoring, coir works, cora grass and screw pine mats weaving bamboo and Reed mat weaving and basket making. In each training centre a fixed number of trainees were admitted and given training for a period of two years. Later some of these training centres were converted into production-cum-training centres by adding a production wing to accommodate some of the trained persons.

Objectives

The study aims at examining the extent to which the training programme is effective in raising the social, educational and economic standards. Inter-alia an attempt has been made to study the general performance of the scheme and to suggest corrective measures for its better functioning.

Methodology

Data have been collected from all the 22 production cum-training centres and other 66 training centres through mailed questionnaires. About 25% of the above training centres were selected at random for detailed study. Supplementary data were also collected from the Directorates of Harijan Welfare and Tribal Welfare

The field survey was conducted during March August 1978.

Findings

I. Location and Distribution of Training Institutions

1. The concentration of training institutions in respect of Harijan and Tribal Welfare is found to be in Thrissur district

2. A higher percentage of institutions are located in rural areas.
3. Most of the training institutions are housed in Government buildings.

II. Basic Amenities

4. About 34% of the institutions lack in safe drinking water.
5. Sanitary facilities are not satisfactory in at least 39% of the institutions.
6. The upkeep is far from satisfactory. In about 50% of the cases there are no compound walls or fencing.
7. Only 48% of the institutions are provided with water supply.
8. There is lack of working space.

III. Tools and Equipments

9. The existing system of distribution of tools and equipments should be restructured or modified. Cases of interruption of training programme for want of tools and equipments was also noticed.
10. There are no proper departmental arrangement for the repair of defective tools and equipments.
11. The sponsoring departments have not taken seriously to mechanisation of carpentry units in the training centres and production-cum-training centres.

IV. Raw Materials

12. As the existing system of distribution of raw materials is defective it should be restructured or modified.
13. Annual indents for raw materials are not based on scientific estimation techniques.
14. Non availability of coloured cotton yarns poses a problem to weaving units. So these units cannot meet the demand for coloured items of clothes.

V. Syllabus and Text Books

15. The present syllabus is very old. A new syllabus covering the modern techniques of production and usage of modern tools and equipments is highly necessary.
16. Suitable text books covering the topics of the syllabus are not yet published.
17. There is no mechanism to prepare question papers, conduct examinations, value the answer papers etc. These functions are performed by the Industrial supervisors.

VI. Training

18. A large number of the trainees are without the necessary aptitude or enthusiasm as revealed from the number of drop outs.

19. The topics included in the syllabus in carpentry is much difficult to cover in two years.

20. The practical training is insufficient to produce the desired results.

21. The present monthly rate of stipend is inadequate

22. The trainees are not aware of the latest development in their trades as the syllabus is out-dated.

23. There is lack of effective technical supervision

24. There is no provision for inservice training and refresher courses to improve the efficiency of the staff in their subjects.

VII. Employment Prospects

25. Of the number of candidates trained only 30% are placed in jobs

26. There is no mechanism to follow up studies on employment prospects for the trained.

VIII. Production Programmes

27. Stocks of handloom clothes and ratten products have accumulated to alarming proportions.

IX. Marketing of Products

28. There is no organised effort to find markets for the products of the training centres and the PCTC's.

X. Trainees placed in the PCTCs as skilled Workers

29. The wages paid to the trainee converted skilled worker of the PCTC is very low.

30. The subsidies paid to those who seek self employment programmes after completion of the training is inadequate.

XI. Administration

31. The rate of permanent advance sanctioned to the PCTC is to be enhanced to meet emergencies.

32. There is no direct access to the District Welfare Officer by the heads of the Training Institutions. This caused inordinate delay in transacting official business.

33. At present there is no way to stop discontinuance of trainees after availing monthly stipends and lumpsum grants.

Suggestions

1. The trainees in the PCTs and other training centres should be provided with modern tools and equipments and they be trained in using them.,
2. Establishment of a common servicing and repairing centre is advisable. Before effecting purchase technical experts should be consulted.
3. A new syllabus for training to cope with the latest developments is suggested.
4. An Examination Board is to be set up and the certificates issued.
5. Suitable text books should be prepared based on the syllabus. Uniform syllabus should be introduced and printed copies of the same distributed to all PCTCs.
6. Technoical supervision of the training programmes can be made more effective by allotting a fixed number of institutions to each industrial supervisor.
7. A dyeing unit may be started under the joint sponsoring of the Department of Harijan Welfare and Tribal Welfare.
8. The Government may give directions to all Heads of Departments to purchase articles especially Ratten and Weaving goods only through the PCTs.
9. The subsidy given to trainees to start self employment ventures after completion of their training should be enhanced to Rs. 1000
10. special cells to study the placement of the extrainees may be opened in the Harijan Welfare and Tribal Welfare Departments.
11. A skilled Assistant may be appointed in each production centres to assist the instructors so that the instructors can utilise more time for theory and practical classes.
12. As far as possible the production centres and the training centres are to be located in Taluk and District Head Quarters.
13. Electricity is to be provided with in all the Training and Production centres to facilitate automation.

Lead Bank Scheme in Malappuram District

Introduction

The Lead Bank Scheme was introduced in 1972. The lead role has been entrusted with the public sector banks of which Canara Bank had the largest share. The lead bank scheme was evolved to ensure larger flow of credit to the neglected sectors of economy like agriculture, small and cottage industries, retail trade etc. Under this scheme proper co-ordination between financial institutions and the development departments of the state at the district level was aimed at. District Credit Plans incorporating schemes for the development of the rural economy was prepared by the Lead Banks and implemented with the participation of the different financial institutions. The Lead Bank Scheme in Malappuram district had started functioning in 1972 with the constitution of the District Consultative Committee. But it was activated only with the launching of the District Credit Plan in 1976.

Objectives

1. To assess the progress of implementation of the different schemes under the District Credit Plan.
2. To assess the level of utilisation of Credit facilities provided by the financial institutions and their adequacy.
3. To study the economic impact of the scheme in terms of income and employment generation and
4. To assess the extent of co-ordination between the financial institutions and development departments of the State in formulating and implementing the scheme for the overall development of the district.

Methodology

The scheme-wise data relating to the implementation of the Credit Plan as furnished to the lead bank periodically by the participating financial institutions have been obtained from the Lead Bank in order to analyse the progress of implementation of the plan. The field survey was conducted during March-May 1980.

Findings

1. Branch expansion

The average population for Bank branch is still below the state average in Malappuram district. There is regional imbalance also in the respect of banking facilities. The expansion of Bank branches in future is to be effected in such a way as not to affect the operation of the existing co-operative credit institutions in the rural area.

2. Absence of branch wise targets

Fixing up branch-wise targets under different programmes seems to be essential to ensure the effective implementation of District Credit Plan.

3. The Performance of Different Institutions

The actual flow of credit through the Commercial banks was more (58%) as compared to the Co-operative Institutions (40%). The contribution of Kerala Financial Corporation was dismal.

4. Actual credit Disbursement and Original targets

The overall release of credit in the district was more than the target. But the scheme-wise performance was far from the targetted allocation. In the case of Crop loan and dairying the performance was satisfactory whereas in some other important sectors tremendous shortfalls were exposed.

5. Some conspicuous failures

The credit disbursement under the small industries programme during the credit plan period was far from satisfactory. The ineptitude of the governmental machinery entrusted with the programme, the inherent weaknesses of the schemes and their inefficient implementation have been the main contributory factors. Errors have been committed in the selection of schemes, entrepreneurs and sites. There was complacency in implementing the Khadi Board Schemes.

6. Credit-deposit ratio

The Lead Bank and the Gramin Bank were maintaining a high credit deposit ratio during the credit plan period. But the State Bank Group and some other public sector banks were not in pace with the Lead Bank in this aspect.

7. Advance to Priority sectors and under Differential Rate of Interest.

The overall share of advance to the priority sector was satisfactory during the credit plan period. Loans under the Differential Rate of Interest was also higher than the stipulated minimum of 11/2%.

8. Assessment of Economic Activities by the banks in this area of operation

Half the number of the Commercial banks and most of the co-operative banks did not make any attempt to become acquainted with the economic activities of the area. Such a grass root level contacts would have become necessary if the banks had action programmes keeping in view the needs and potentials of the area of operation.

9. Viability of Schemes

Since there was no grass root level planning, the schemes put forward were not suited to the concerned area. Hence the incidence of failure was acute

10. Low off-take of credit

Certain schemes were not popular. The reasons may be the ignorance of the people, the general backwardness of the people, high rate of interest, insistence of guarantee cumbersome procedure etc.

11. Support from Government Machinery

The development departments, should take an active role in motivating the beneficiaries, in offering technical guidance to them, in ensuring the proper utilisation of the loans and recovery of loans.

12. Lack of field staff and inadequate powers to the Branch managers

A major handicap in the way of operation of the schemes is the total absence of field staff to function as liaison staff between the banks and the beneficiaries. More powers may be delegated to the Branch Managers to enable efficient credit operation.

13. Problems of co-operative credit

The procedure of obtaining loan applications and the three tier system of credit operation of the co-operatives cause much delay in the operation of credit. This results in low off-take.

14. Selection and posting of staff

The Branch Managers should be selected from among those who are development conscious. It is suggested that the Branch Managers should not be changed during the credit plan period.

15. The District Consultative Committee

The D.D.C. should have worked out a programme of action covering the different regions and sectors of economy of the district. The functioning of the D.C.C. is not effective. It should be convened once in a month and the deliberations should be made more concrete and purposeful.

16. Block Level Consultative Committee

Block level consultative committees (BCC) should be constituted in every Block to work out the details of the Block Level Action Plan for each month. The deliberations of the D.C.C. should be communicated to the B.C.C.

17. Machinery for Internal assessment

The D.C.C. should constitute a sub committee for internal assessment of the working of the programme. the committee should visit the field to study the impact of the scheme.

18. Loans under differential Rate of Interest (DRI)

The D.R.I. is meant for the weaker sections of society and the banks should be vigilant about misuse of this facility.

19. Misuse of credit

A small percentage of beneficiaries have misused the credit proper credit use calls for effective monitoring by the lending institutions.

20. Cost of credit and the preference of Beneficiaries

The time and expenses needed for getting a loan varied from institution to institution. Co-operative credit seems to be less popular as it is time consuming and involving more cost.

21. The Schemes Assisted

The crop loans were prone to misuse due to untimely disbursement and lack of monitoring. As far as dairy schemes are concerned fodder availability was the decisive factor. The pumpsets were not used to full capacity as it was not in tune with the size of holding. Lack of knowledge about water table leads to infructuous investment on wells. The credit pumped to the fishery sector was much useful. The schemes for self Employment were found to be helpful to the lower strata of society. The credit supplied to the small industrial units was also properly utilised. The vehicles purchased on credit under Lead Bank Scheme though not served the self employment aspect was also not misutilised. The number of Gobar Gas Plants established were much below the targetted level.

Integrated Rural Development Programme

Introduction

The Rural Development Programmes were at first implemented through the Community Development Blocks. The Community Development Programme launched in 1952 was in fact an integrated approach towards rural development.

Based on the experiences gained through the implementation of the C.D. Programme other programmes like SADU, MFAL, DPAP and CAD etc. were implemented. These programmes have led to the evolution of the Antyodaya programme which emphasised the need for growth with justice. The Integrated Rural Development Programme introduced towards the end of the V Plan is a synthesis of the strategies tested and found effective from the experiences acquired through the special programmes like SADU, MFAL, DPAP, CAD etc.

Objectives

- i. To ascertain the extent to which the programme served the target groups belonging to weaker sections of society.
- ii. To examine how far the programme has succeeded in its ultimate objective and
- iii. To study the extent of co-operation among the implementing agency, the financial institutions and the beneficiaries.

Methodology

The study was conducted through field visits, discussions with the implementing agency, financial institutions and beneficiaries. Also information was collected from contact beneficiaries, non beneficiaries, Block Development Officers and knowledgeable persons who are in touch with the programme at the field level with the help of questionnaires specially designed for this purpose.

The reference period of the study was The reference period of the study was 31st March 1980.

Findings

1. In most of the blocks the household survey has not been properly conducted and the list of households eligible for assistance, the household plan and the banking plan for the block has not been drawn up.
2. 18% of the families assisted were above the poverty line and hence were not eligible for assistance.
3. The percentage of Scheduled Castes assisted under the programme was much below the targeted level.
4. There has been over emphasis on agricultural and allied sectors whereas low emphasis was marked for industrial schemes.
5. A package of schemes has not been drawn up family-wise and offered to the beneficiaries.
6. The percentage of loan assistances under the differential rates of interest for the beneficiary group has been very low.

7. The average amount invested per beneficiary is quite low as compared to the minimum requirement for economic activities.
8. The average investment for most of the subsidiary occupations is very meagre.
9. The share of the commercial banks in the distribution of assistance is substantially high (63%) as against CO-operative institutions.
10. There has been long delays in sanctioning of loans and disbursement of loans.
11. The beneficiaries have foregone their work to pursue the loan applications and also incurred costs to secure the loan.
12. A Small proportion of the beneficiaries have misutilised the assistance and no action has been taken to recover the amounts,.
13. Most of the scheme taken up for implementation were of short gestation period. Even then the income flow out of the scheme is only partial.
14. The gross increase in income is reasonable only for schemes of short gestation period. the reported increase in net income is however comparatively low for all the schemes.
15. Though financial targets have been achieved, the physical targets lagged behind as revealed from the number of households which crossed the poverty line.
16. The employment generation is negligible except for road transport operation.
17. The message on IRDP was spread through the Village Extension Officer. The contribution of representatives of local bodies, social workers, co-operative societies etc. is scanty.
18. A large proportion of non beneficiaries also heard of IRDP but were not enthused because the information was not sufficient.
19. There has been very little involvement of representatives of the public and the society on the implementation of IRDP.

Recommendations

1. The list of households eligible for assistance under IRDP should be prepared based on a household survey conducted in all blocks.
2. Household plans, credit plans and implementation plans for the Blocks should be formulated in advance. the Block administration is to be suitably strengthened to cope with these new tasks.
3. Monitoring should be done at all levels.
4. The representatives of the target groups, public and other social organisations should be associated with the selection of the beneficiaries and the implementation of the I.R.,D. Programme.
5. Since the holding size of the beneficiaries is very small schemes based on land cannot be given priority. Self employment schemes suitable to the concerned area and depending on the skills of the potential beneficiaries, should be formulated.

6. The services of Industries Officer, Veterinary doctor, other extension officers etc. will have to be made available to the Blocks at the formulation stage and implementation stage of specific schemes.
7. Marketing support for the various products under IRDP should be extended. The necessary infrastructure for the effective operation of the scheme should be set up.
8. the quantum of assistance per family may be enhanced.
9. Statae level rate contracts may be arranged for the purchase of pumpsets, sewing machines etc. to curtail malpractices
10. The financial institutions should be associated with the preparation of the credit plan to ensure loan assistance by the financial institutions.
11. The rules and regulations set for the sanctioning of the assistance should be identical for commercial banks and co-operative banks. It should be made binding on the part of the bank branches to give priority to IRDP loans.
12. Based on the package of schemes for a household loans should be provided through stages without waiting for the full recovery period of the earlier loans.
13. The period of repayment of the loans should be determined on the basis of the repayment capacity of the beneficiaries
14. It is necessary to sanction additional loans to beneficiaries who have crossed over poverty line to enable them to remain there.
15. The delays in sanctioning and disbursement of loans should be avoided.
16. The information of IRDP should be passed on to the potential beneficiaries through brochures or booklets in vernacular
17. Concurrent evaluation of IRDP should be done by an outside agency.

Farmers training Programme

Introduction

The main emphasis in increasing agricultural production during the plan period has been on the adoption of improved technology of cultivation. At the national level the first concrete step for disseminating scientific knowledge of cultivation practices among the farmers was the launching of National Demonstration Programme by the Directorate of Extension of the Ministry of Agriculture in April 1965. During the following year the Ministry sponsored an ambitious, 'Farmers Training Programme' in about 100 selected districts of the country with the specific objective of imparting institutional and non institutional training to the farmers. The farmers training programme has been in operation in Kerala since 1968, under the Department of Agriculture. Farmers' training Centres were set up in Thiruvananthapuram, Ernakulam (which was later shifted to Thrissur), Taliparamba (which was later shifted to Kannur), Pattambi and Kollam. The main functions of these centres were to conduct short term training courses for farmers and to organise charchamandals (discussion Groups) of farmers in the different parts of each district. The Centres have been offering non-institutional training courses of the following types (1) One day's training cum demonstration camps for men and women (2) Five day's training camps for men and women (3) Three days training camps for conveners of Charchamandals.

Objectives

1. To see whether the training is given to the right person.
2. to assess the usefulness of the courses as regards the coverage and method of teaching.
3. To assess the level of adoption of the improved techniques by the trained farmers and the problems faced by them and
4. To examine the effectiveness of the Charchamandals and the problems faced in their working

Methodology

The secondary data relating to the programme have been collected through discussion and correspondence. A field survey was conducted in a few selected blocks of Thiruvananthapuram, Thrissur, palakad and kannur districts covering a total of 420 selected sample farmers who have participated in the training during 1977-78 or earlier. A sample of about 100 non-beneficiary farmers also was selected to obtain the necessary details.

Findings and suggestions

1. Since very few women are involved in farm management, it is suggested that instead of organising equal number of camps for men and women the number of camps for men may be increased to three-fourth of the total camps organised.
2. It is always preferable to select persons with main occupation as Agriculture for training programme to get the best results.
3. Instead of education the criterion for training should be the active involvement in cultivation. The training lessons should be given in the local language instead of the technical language.

4. Field demonstrations are taken as an integral part of the training programme. The syllabus and method of teaching adopted for the training should have been subjected to criticism in order to perfect the curriculum.
5. Arrangement should be made to supply the trainees with printed notes on the topics discussed in the class. Production of films and slides depicting the real situation within the state is to be preferred.
6. A time change from day time to evening may be thought of.
7. The training was useful in as far as the spread of HYV, better selection and germination of seeds and better farm practices.
8. The mobile soil testing units of agriculture department is to be devotail-
ed to the Farmers training Programme. It will also have a demonstration effect
in the rural areas.
9. About 72% of the trainees had dairying as a subsidiary occupations.
10. The Agriculture department may propagate the newer rodent control methods
and supply the necessary chemicals to the farmers.
11. There should be effective follow-up of the farmers who were trained. The
extension staff should contact the farmers and suggest remedial measures to
the problems.
12. The wrong selection of conveners seemed to be an important factor that
led to the failure of the Charchamandals.
13. The farm broadcasts over the all India Radio were very popular among the
farmers. But the majority of the farmers were not provided with radio sets.
14. The arrangement for supplying published materials to the Charchamandals
was not working properly. The financial assistance to the active Charchamandals
was also not extended to many of them.
15. The Charchamandals were not functioning as desired. Hence the propo-sition
of setting up 300 Charchamandals in a district and maintaining all of them active
in all respects seems to be very ambitious.

In conclusion it may be suggested that the selection of trainees, the training and content of the course, the follow-up of trained farmers and the merging of F.T.P. with the Training and Visit programme important aspects which need careful consideration by the Department and Government.

Intensive Cattle Development Programme

Introduction

The 1977 Livestock census counted the number of cows in milk to 7.05 lakhs of which 3.71 lakhs were of improved strains. The first scientific attempt for the betterment of dairying in Kerala was attempted with the launching of the Key Village scheme. Next came the Indo Swiss Project, joint venture by the Government of Kerala, Government of India and the Government of Switzerland. The Intensive Cattle Development Programme was started to boost milk production. The first Intensive Cattle Development Project was established at Alwaye in 1968. The project aimed at the allround development of cattle in the project area by providing the necessary infrastructure and extension services. The programme envisages collection and distribution of superior germ plasm for intensive artificial insemination, emasculation of undesirable and inferior male stock, feed and fodder development, disease control and development of marketing channels for the cattle products.

Objectives

1. To assess the organisational and administrative problems in the implementation of the programme.
2. To make an appraisal of the achievements, resources utilised and bottlenecks..
3. To assess the impact of the A.I. Programme among cattle owners and on milk yield.
4. To study the production, consumption and disposal of milk.
5. To find out consciousness and reactions of the cattle owners towards castration, artificial insemination feed and fodder development up keep of cattle, disease control etc.
6. To assess in general the impact of the programme on the growth of Animal husbandry and creation of income opportunities.

Methodology

The secondary data required for the study was gathered from the concerned institutions. A field survey was also conducted covering a selected number of beneficiaries and non-beneficiaries.

Findings

1. There is wastage of semen to the extent of 50% due to the absence of modern storage and preservation methods.
2. Only 22 to 27% of the breedable cattle population of the project area were brought for first artificial insemination. The remaining were repeaters of the previous ones found unsuccessful. The conception rate in cows artificially inseminated ranged between 36 to 44%.
3. The percentage of examination of cows for pregnancy after artificial insemination has remained between 50 to 90%. the pregnancy diagnosis by livestock Assistants was poor.
4. The number of calves born for 100 artificial insemination gradually increased over years and stood at 28 male and female calves born out of artificial insemination remained more or less equal.
5. The main problems in castrating scrub bulls or calves were orthodoxy, non co-operation of cattle owners, low interest of panchayats, low rate of conception, loopholes in Livestock Improvement Act and difficulties in implementing the Act.
6. The feed and fodder development programme of the project met with failure. The recommended feeding practices were not followed due to poverty of the cattle owners, uneconomic milk yield and preference to traditional feeding.
7. The entire area covered by the ICDP has a net work of veterinary hospital, dispensaries and sub centres. But the sub centres are not equipped to cope with the needs of the cattle owners.
8. In the marketing of milk the organised sector played a limited role. There was no co-ordination between the Agency and the Dairy Development department in creating the necessary infrastructure for milk collection and disposal.
9. The Milk Co-operative societies were not allowed to enjoy the incentive on par with the credit co-operative societies.
10. The percentage of beneficiaries availing artificial insemination to their cattle has increased to 58%.
11. The reasons for the poor conception rate is attributed to the failure to observe the heat period of animals, nutritional deficiency, poor quality of semen and lack of expertise of the Livestock Assistants.

12. Majority of the beneficiaries have opined that the artificial insemination has no ill effects, incidence of infertility on improved breeds is not high and the improved strains are suited to their locality.

13. A comparison of the milk yield of local and improved strains has revealed that the higher the grade of improved progeny the better is the milk yield.

14. The fodder development programme has not made any noteworthy impact.

15. The reception rate for preventive measures for the cattle against contagious diseases were high whereas in the case of other medical facilities it was very low.

16. An analysis of the consumption and marketable surplus of milk revealed a declining trend in consumption of milk and gradual increase in the marketable surplus of milk.

17. The cross bred cows of the first generation if allowed to be crossed by the local varieties, upgradation of the cattle population will not be achieved in the near future.

18. The ICD Programme though started as a Centrally Sponsored Programme, later it was transferred to the State Sector. This change seems to have affected the working of the programme.

Suggestions

1. The coverage under artificial insemination is to be intensified. It is necessary that the cows which do not conceive in the first insemination is to be tried with repeaters. The Livestock Assistant should be made responsible for complete pregnancy diagnosis of all animal inseminated in each sub centres.

2. Steps may be initiated to castrate all scrub bulls. The loopholes in the Livestock Improvement Act may be plugged and the Veterinary Surgeons may be given legal training in implementing the Act.

3. The high production potential of the improved breeds are not tapped fully due to lack of proper feeding programme. Hence feed subsidy or loan may be given with proper tie up with the Co-operative Societies.

4. *There is the need for developing a new strain of green fodder suited to Kerala conditions. The project may plan for raising compact green fodder forms of its own for distribution to the beneficiaries.*
5. *There should be close co-operation between the Dairy Development department and the animal Husbandry department in the implementation of the various com ponents of the programme.*
6. *It is absolutely essential that periodical surveys are conducted to study the level of milk production, marketing, feed resources and economics in milk production.*
7. *The Livestock Assistants should be given refresher training courses to equip them with latest techniques in artificial insemination, preliminary treatment and extension methods. The sub centres should be fully equipped.*
8. *It is desirable to integrate the different activities for cattle development by a multiplicity of departments and organisations.*
9. *The present strenth of one doctor for 25 sub centres is grossly inadequate. so three veterinary doctors for each region at the rate of one doctor for every eight sub centres are necessary for supervising the work of the Livestock Assistants.*

Thonnakkal Colonisation Scheme

Introduction

Kerala State has 26 lakhs Harijans which constitute 10.02% of the total population as per 1981 census. The State Government had been giving high emphasis for raising the Socio-economic Status of this group through various programmes. In this context a project was formulated in 1971 to settle 180 educated harijan families at Thonnakkal. The project contemplated not only housing the families but also in providing 1/2 an acre of land in the premises of the individual houses for cultivation and a collective plantation operation in 360 acres further away. The implementation of this project started in 1972 at an estimated cost of Rs. 32 lakhs.

Objectives

- i. Assessing the progress of the colonisation project and identifying the factors inhibiting the smooth implementation of the project and
- ii. Assessing the economic impact of the project on the target group.

Coverage

The study had covered all the families in the colony. The reference period of the study was from 1st July 1980 to 30th June 1981.

Findings

1. Construction of 180 houses

It was decided to construct 180 houses in the colony within 2 years. But this was not complete even after 10 years and the houses are at different stages of construction. Some mismanagement in the purchase and use of building materials was found. Also the construction materials used were of poor quality.

2. Water supply scheme

Drinking water supply scheme in Thonnakkal colony was a failure. The reduction of the estimated outlay reduced the work unsatisfactory. The contractor left the work half way through. Study reveals that this water is used by none in the colony for drinking and also the number of taps was insufficient to meet the needs of all the colonists. Present taps are not put up in the proper places. Water was being carried away by outsiders also.

3. Providing electricity to the colony

The wide difference between the estimated cost and the amount incurred has resulted in considerable defects in the scheme. It took five years to complete the work sanctioned in 1972 and reviewing is required in most of the houses and additional expenditure to replace the old materials.

4. Medical facilities

It is seen that the responsible officers had not shown any interest to construct a 10 bedded hospital as envisaged. The proposed site has not even been transferred to the colony from the Revenue Department.

5. construction of Roads, Office Buildings etc.

The construction of roads was intended to give jobs to the colonists. But the authorities appointed contractors, consequently they got very little employment under this scheme. Some land was allotted to other purposes viz., 2 acres for constructing a mosque which created such dispute. Encroachment by outsiders is also observed. PWD has failed to make use of 10% of the general fund allotted to Scheduled Castes under the special component plan.

6. Agricultural operations

A farming society was envisaged in the project to promote cultivation. A grant of Rs. 62500 was received for cultivation. Instead of using it for cultivation in 50 cents house sites, it was used for rubber cultivation in 60 out of 360 acres which was a failure. No steps for irrigation and other inter crop cultivation had been taken. The Society has failed to ascertain whether the loans taken were used for cultivation purposes.

7. Irrigation

The amount earmarked for irrigation lapsed due to the non-implementation of the irrigation scheme.

8. Soil conservation work

The earlier soil conservation work done in the 200 acres became a complete failure.

9. Supply of livestock

There was provision in the scheme for providing milch cows and sheds, poultry birds and sheds to 180 colonists. But only 99 cows were distributed. There is not even a single shed existing. As money was given instead of hens a few colonists bought the birds. The timber used for poultry shed were of low quality which resulted in their complete destruction in course of time. The distribution of cows and hens was done at the time when they were facing problems of settlement. So they were forced to sell the cows at low prices. The colonists got little benefit from the Animal husbandry programme. The fodder scheme envisaged in the project report was not implemented so far.

Keltron Unit

Keltron is completing a successful unit of its own in the colony. This has raised hopes of regular for employment to many of the colonists.

Khadi and Spinning Unit

There is a Khadi spinning Unit working in the colony under the control of the Director of Khadi and Village Industries. If the colonists show more interest this will become a success and enhance their income.

Balavadi, Nursery School and children's Park

3 Balavadies are run by Social Welfare Department with U.N. aid. These are functioning like feeding centres, providing nutritious food and milk. A nursery school has been started but the performance is poor due to lack of necessary facilities and permanent building. Construction of children's park is not completed. It is expected to complete the work shortly.

Suggestions

1. Under C.S.R.E. scheme, the colonists are to be provided with job opportunities fully. Schemes under the project should be implemented so as to get maximum employment to the colonists by deploying them wherever possible.,
2. The pending works of the houses should be completed at the earliest.
3. The Housing Board may be engaged for all construction works including houses to the beneficiaries.
4. Steps may be taken for purification of drinking water by constructing an additional tank. A tap may be provided for every 5 houses.
5. As envisaged in the project, a ten bed hospital should be constructed at the earliest.
6. Construction of office building and other complex may be started with immediate effect, by obtaining 62 acres of land earmarked for this purpose from the Revenue Department.
7. The existing roads are to be maintained properly and new roads may be constructed to reach their 2 acres plots easily.
8. A revised estimate may be prepared in order to rectify the mistakes and improving the quality of wiring in the dwelling units.
9. Sufficient furniture, equipments and playing materials may be provided for the Balavadi and Nursery school.
10. A scheme for intensive cropping of the 50 cents of land adjoining each household may be drawn up and implemented.
11. For rubber cultivation in the 360 acres of land, top priority may be given for fencing and a nursery may be established in consultation with Rubber Board.
12. A scheme may be formulated for cultivating tapioca, coconut etc. with homestead of 50 cents each. Irrigation facilities may be given by digging tube wells.
13. Steps may be taken to distribute agricultural implements at least once in 2 years to the poor colonists on a selective basis.
14. The ARDC loan sanctioned years ago may be revised after current estimation on the loans required for the rubber plantation.

15. The help of District Co-operative Bank may be solicited for the development of the colony.

16. The soil conservation work may be started after the fencing.

17. To promote cattle rearing, the overdues of the colonists in this respect has to be written off, enabling to qualify them for availing fresh loans.

18. The fodder cultivation proposed in the Project report should be started immediately.

19. Since about 22 acres of the land, is rocky there is much scope for starting quarrying and crushing of stones. With support from Government the beneficiaries can be employed in such activities. The co-operative society of granite workers which is dormant at present may also be revived.

20. A committee of officers from the concerned implementing departments should be constituted with a view to co-ordinate the various schemes.

The Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes

Introduction

The Scheduled Castes and Scheduled tribes were subjected to economic exploitation and social discrimination for centuries. The upper castes considered them untouchable and also unapproachable. In spite of the safeguards provided in the constitution this historical background has kept them away from the main stream of national development.

There were 25.49 lakhs Scheduled Castes and 2.61 ;lakhs Scheduled Tribes in Kerala state constituting 10.02% and 1.03% respectively of the population as revealed from the 1981 census. The state Government has been adopting a series of measures to alleviate the miseries of this lot. The budgetary resources channelised through Harijan welfare and Tribal Welfare departments are too insufficient compared to the grave needs of this people. Thus the necessity to attract institutional finance was keenly felt.

The State Government decided to set up a Corporation to deal with the problem of employment and the general improvement of this class.

That was how the Kerala State Development Corporation for scheduled Castes and Scheduled Tribes came into existence with its head office in Trissur.

Objectives

1. To study the programmes undertaken by the corporation and to ascertain how far these programmes have served the objectives of the Corporation.,
2. To study the present organisational set up of the Corporation and to ascertain whether it is adequate for realising the objectives of the Corporation and
3. To suggest corrective measures, if necessary, for the quick and better implementation of the programme so as to achieve the objective laid down by the corporation in the most efficient manner possible

Methodology

A sample survey of the beneficiaries of the Corporation, covering all schemes and all districts was conducted during December 1982 and January 1983. Discussions were also held with the officials of the Corporation at various levels and other knowledgeable persons.

Findings

1. Beneficiary Oriented Schemes

1. Supply of autorickshaws

The scheme though conceived well, could not succeed as is evident from the dues to be recovered (Rs. 22.80 lakhs) from the beneficiaries.

The scheme is economically viable as the net monthly earnings amounted to Rs. 650 against a repayment commitment of Rs. 400. But still a majority of the beneficiaries became defaulters. If the dues were collected on a daily basis the scheme would have succeeded.

2. Small Business, Trade and Industry

The assistance given by the Corporation under this head was clearly misutilised by most of the beneficiaries. Out of those who used the assistance to full utility as many as 82% were defaulters.

3. Agricultural land purchase scheme

This scheme is an asset creating one and paved the way for social change and a proper outlook for development. The utilisation of assistance in this case was maximum. There seems to be a preponderance of submarginal lands in the purchases made by the beneficiaries under this scheme.

4. Margin money for bankable schemes

The Corporation was not successful in mobilising bank assistance to beneficiaries.

5. Loans for purchase of machinery and margin money for mini-industrial estates.

These two schemes of the Corporation were nonstarters as judged by the number of beneficiaries.

6. Foreign Employment Schemes

The scheme envisages a first instalment of assistance on production of a passport. A high percentage of beneficiaries (48%) availed the first instalment and later did not produce a visa to avail the second instalment. Subsequently the scheme was modified to plug loopholes.

7. Sewing Machines

Among the sewing machine supplied under the scheme about one third was lying idle.

8. Housing scheme

The scheme is found to be successful. The two rooms tiled house built with the assistance of the Corporation has given a face lift to the typical SC/ST houses.

II. Assistance to Co-operative societies

Of the six societies assisted three societies proved their ability to repay. At present the Corporation is not assisting the societies.

III. Industrial Ventures

The direct industrial ventures of the Corporation were unsuccessful.

IV. Organisational structure

The Corporation combines in itself both delivery of benefits and recovery of dues from the beneficiaries. But the Corporation by its performance has revealed the functional inadequacies.

The Managing Directors' tenure is too short. Several posts are lying vacant at the Head Office and the regional Offices. The Staff on deputation, provisional hands and staff on daily wages has hampered the efficiency of the corporation.

V. Deviation from the Project report

The project report on housing scheme envisages (i) (i) Categorisation of beneficiaries of housing schemes into four groups based on their family income and to be given varying rates of subsidy in accordance with the income (2) Organisation of housing co-operatives and the share capital so collected to be used for attracting LIC funds and (3) Organisation of co-operative societies for production of building materials to be used for the construction of the houses coming under the purview of the Housing Scheme. But all these aspirations in the project report had to be abandoned. The corporation also failed to organise beneficiary co-operative societies for the provision of supplementary economic programmes. The Corporation could not open district level offices with field officers as contemplated in the Project Report.

Suggestions

1. The Corporation should continue its, laudable efforts for the housing schemes. The scale of finance for housing scheme is to be enhanced in tune with the cost escalation. The beneficiaries should be provided with supplementary economic programmes to enable them be credit worthy.
2. The quality of the agricultural land purchased should be ensured. The Corporation may revise the upper limit of the assistance limiting the total assistance to 80% of the total cost of land. The possibility of mobilising institutional finance may be explored.
3. The scheme of providing assistance for foreign employment may suitably be modified in co-operation with Overseas Development and Employment Corporation. Ltd. to avoid unscrupulous agents.
4. regions of potential for plying autorickshaws may be identified and the beneficiaries brought under the co-operative fold. the repayment may be made on a daily basis to safeguard recoupment dues.
5. The Corporation should take the lead role in organising training programmes for SC/ST to develop the entrepreneurial skills of the SC/ST people.
6. The credit needs of the two societies, a tribul society and the other a Scheduled Castes society have to be fully met by the corporation.
7. It is better that the Corporation desist from all industrial ventures.
8. The Corporation may promote co-operative societies for starting radio assembling units in collaboration with Keltron.
9. The housing schemes and the scheme for the purchase of agricultural land may be continued on a larger scale as these two schemes have been popular.
10. If the State Government provides the corporation with share capital instead of the present loan bearing interest the Corporation in turn can secure more funds from Government of India by way of share capital participation. This will lead to a higher flow of institutional finance.
11. The authority of the district Collector may be made use of to co-ordinate

the activities of the Corporation with the development departments implementing the special Component Plan

12. The corporation may follow a habitat-wise approach in implementing several of its schemes.

13. The Statistical division at the headquarters of the corporation may take up independent studies on the utilisation of loans and the impact of various schemes.

14. District level office with field officers are to be opened to give the necessary guidance to the beneficiaries. Posts at various levels are to be filled by permanent incumbents who will take a genuine interest in attaining the overall objectives of the corporation.

Gramotsava Programme in Munroe Thuruthu Panchayat

Introduction

Planned development in our state has been carried out by the various development departments as an isolated programmes without inter-departmental co-ordination. This has slowed down the pace of development.

Though people's participation has been enunciated as an objective of many of the programmes, it has been implemented in the bureaucratic way. This has resulted in the widening gaps between goals and achievements.

In this context the Gramotsava programme has been well conceived as an experiment in co ordination and organisation for meeting the various developmental needs of a locality, through the active participation of the people, officials and voluntary agencies within a time schedule. The Gramotsava programme was introduced as an official programme in 66 selected panchayats in the state in 1982-83.

Objective of the Programme

The programme aims at accelerated implementation of the on-going developmental activities of Government departments, quasi-Government institutions and voluntary organisations in backward panchayats, through concerted efforts in a timebound manner, with people's participation.

Methodology

A sample survey was conducted in September 1983. A cluster approach using systematic sampling was adopted in the selection of the sample households. In all 99 households constituting 25% of all households in the island panchayat were selected and data was gathered from their heads of the households.

Findings

1. 71% of the informants reported that they did not get any direct benefit from Government so far.
2. the informants were all aware of gramotsava programme.
3. The reasons for not undertaking any ventures under IRDP was attributed to lack of capital, guidance and knowledge of procedural formalities.
4. Most of the beneficiaries were convinced of the usefulness of the programme.
5. the role of the Officials were not appreciated as much as that of non-officials.
6. Community infrastructure schemes like roads, water supply electricity etc. could not be effectively met even after the implementation of Gramotsava.

Observations

The manner in which things are planned and done under the close supervision of the District Collector and the local M.L.A. ensures the active involvement of Officials. This has resulted in the initiation of some useful schemes in Munroe Thuruthu.

2. The gramotsava is meant for arousing and alerting the official machinery to action. But this is possible only if the programme is limited to a few pockets and that too for a short period. Large scale extension of the programme will allow for the usual apathy of the Government Officials to creep into. Lack of funds would also become a constraint in the way of meeting the legitimate demands of the people.

3. The selection of the panchayats is to be done based on relative backwardness, immediate development potential and responsiveness of the local people. Preparation of ranked list of panchayats based on selected criteria is essential for preventing partisan attitude in the selection of panchayats.

4. The Action programme drawn up for Gramotsava in Munroe thuruthu did not spell out the physical and financial targets in respect of the schemes of several major departments. Thus a realistic Action plan keeping in view the potentialities and needs has not been formulated.

5. The most important items of work view the construction of culverts and protective works on the incomplete link road and the construction of culverts and wooden bridges on the Railway Station-peringalam road were not completed. This has resulted in the lack of interest of the people's representatives and they did not conduct the concluding function of the gramotsava. The incomplete works can only be completed with adequate follow-up which is not ensured in the gramotsava programme.

Introduction

In October 1980, Government of India modified the food For Work Programme and formulated the new National rural Employment Programme (NREP), which has become a regular part of the sixth Plan. It aims at providing supplementary employment to the unemployed and under employed rural workers during the lean employment periods of the year.

Objectives of NREP

1. Generation of additional employment for the unemployed persons both men and women in the rural areas.
2. Creation of durable community assets for strengthening the rural infrastructure which would lead to rapid growth of rural economy, and steady rise in the income levels of the rural poor and,
3. Improvement of the nutritional status and the living standards of the poor.

Methodology

The field survey was conducted in 12 Blocks selected at random. From each district 50 workers representing various categories of work were selected from each Block, by adopting simple random sampling method. During the course of the study a sample of 69 works were studied constituting 46 road works 8 minor irrigation works, 4 wells and 11 other works to ascertain their durability and quality. The period of survey was during 1981-82.

1. Observations on the working of NREP

1. Shelf of the projects

The success of NREP depends on the preparations of a scientific shelf of projects to be implemented in each Block in a time-bound manner. But it is prepared in a hasty manner without the necessary technical inputs.

2. Low Financial Achievement

In 1981-82 the expenditure under NREP exceeded the allotment by about 5% where as in 1982-83 it fell short about 28% and in 1982-83 it fell short in all districts especially in Idukki district. The expenditure booked for scheme benefitting Scheduled Castes and Scheduled Tribes was found to be very low

3. Allocation of funds to the Blocks

Even though allocation of funds to the districts is made in conformity with the guidelines, at the Block level the funds are allocated not on this basis.

4. Low off-take of food grains

The distribution of food grains as part of wages has not been satisfactory due to its poor quality. Timely supply of rice also was not satisfactory. As a result the contractors sold it in the open market.

5. Material wage ratio

It was found that this ratio was less than the prescribed ratio 40:60. It was 28:72 in 1981-82 and 32:68 in 82-83.

6. Higher emphasis on roads

Too much emphasis is given for the construction of roads and this was against the guide line. Road works should not be taken under NREP unless there is adequate provision for their proper maintenance and hard surface and hard surfacing. Durability and quality of road works were not satisfactory.

7. Employment generation

The NREP succeeded in bringing about more employment even though it could not provide full employment to all the unemployed and under employed in the rural areas. The reported figures of employment are on the high side.

8. Wage rates

Under NREP the wages per day are fixed as Rs. 10 for men Rs. 8 for women and Rs. 7 1/2 for children respectively. The wage rate prevailing even in the farm sector was 50 to 100% above these rates. Therefore, the wages fixed under NREP are unrealistic.

9. People's participation

The panchayat committee is actively participating in the selection of projects, execution of works, finding out beneficiary committee conveners to take up the work etc. The people's participation was found mainly in the form of free surrender of land for construction of road and other works.

10. Community assets

A huge amount of money was invested and community assets mainly roads were created in the rural areas but most of them were improvement works. The rate of completion and the durability of the works were found to be low. A good number of these works spilled over to the next year and many of them were left incomplete for want of funds in subsequent years. Hence it is doubtful whether these assets will contribute for the rapid growth of the rural economy.

11. Improvement of nutritional status

There is no visible impact on the nutritional standard of majority of the participant workers.

Suggestions

1. Shelf of projects to be technically sound

The shelf of projects prepared is only a list of works with preponderance of road works. The Panchayat Committee and Block Advisory Committee can only identify the problems and pose ideas. So the work of drawing up the shelf of projects should be entrusted to the Block Development Officers. It should be drawn up in such a way that it forms part of a co-ordination and integrated plan for each Block and would bring about the creation of all the infrastructural assets in the area in a phased manner.

2. Works to be executed by Conveners of Beneficiary Committees

As far as possible, works under NREP should be got executed by Conveners of beneficiary Committees. This will help to obtain the co-operation of the people.

3. NREP wages to be made realistic

The wage of unskilled workers under NREP should be made realistic with prevailing agricultural wages in the Block.

4. NREP works to be completed in a durable manner

As far as possible all works undertaken in a year should be completed in that year itself without sacrificing its durability.

5. Supply of construction Materials

There should be proper arrangements at the DRDA level to acquire and supply scarce construction materials like Cement and steel rods, so as to ensure timely execution of works.

6. Ten percent of the funds to be spent on SC/ST

The target of 10% of the funds provided for the benefit of SC/ST has to be strictly observed.

7. Distribution of rice as part of wage

If the timely distribution of quality rice to the workers cannot be ensured it is better to pay them fully in cash and divert the rice quota allotted for this purpose to the Civil Supplies Department for distribution through fair price shops so as to stop malpractices now existing in this respect.

8. More funds for NREP

The NREP should be incorporated with other rural development programmes under which a good deal of investment has been made. To make such investments more productive and effective it is necessary that more community assets are created under NREP and they are made durable. To reduce unemployment and underemployment currently existing among rural workers it is necessary to raise allocation of funds to NREP.. This has to be done on the basis of a proper assessment of the Block wise requirement in this regard.

Intensive Handloom Development Projects and the Export Promotion Project

Introduction

The Government of Kerala appointed a committee consisting of officials and non-officials to draw up a time bound programme for the development of handloom industry in the State. The proposals included schemes for the setting up of two Intensive Handloom Development Projects, Common Facility Centres, Export Oriented Production Centres and for increasing the co-operative coverage of handloom weavers.

These proposals were presented to the Government of India. The Government of India sanctioned as part of an all India policy of assisting handloom industry, two Intensive Handloom Development Project and an Export Promotion Project for the state. This was a Centrally sponsored Scheme with an outlay of Rs 410 lakhs. The State Government located one of the Intensive Handloom Development Projects at Thiruvananthapuram and the other two at Kannur. The projects were started in 1977-78 and were to be completed in five years. The Kerala State Handloom Development Corporation

were entrusted with the responsibility of implementing all the three projects.

Objectives

The projects were intended for helping the handloom weavers in the state for diversification of products, quality improvement marketing of products including export so as to raise their income and standard of living. The present study was taken up with the following objectives-

- i. To study the implementation of the projects and to assess how far they have achieved their physical targets and the reasons for bottlenecks, if any,
- ii. To gauge the impact of co-operativisation, diversification of production, quality improvement and marketing of products and to assess their effects on socio-economic life of the target group.
- iii. To ascertain how far the guidelines suggested by Government of India have been followed in the implementation of Projects and
- iv. To suggest the direction in which improvements can be made.

Methodology

Data for the study was collected by contacting the societies, weavers benefitted by the various schemes under the Projects and from progress reports or other records available with the Directorate of Handloom, Handloom Development Corporation, Project Officers and the various institutions sponsored by the Projects.

Findings

1. Project Implementation - low physical achievement

1. Organisation of societies.

The physical achievement in respect of organisation of new factory type societies was only 48%.

2. Installation of looms

The physical achievement in respect of looms proposed under the two Intensive Handloom Development Projects and the Export Promotion Project was only to the extent of 46%.

3. Looms worked

Only 54% of the installed looms were working during 1981-82.

4. Production of cloths

The daily loom-wise production was far below the optimum level of production expected under ordinary circumstances. The average production was only 2.75 meters valued at Rs. 23.50.

5. Implementing agency functionally incompetent

The Kerala State Handloom Development Corporation was the implementing agency. The functional incompetence of the Corporation is revealed by its performance.

II. Project impact on target group co-operativisation - very negligible

6. Low income generation

The projects were working under installed capacity. Therefore the project did not fulfill the objective of employment generation.

7. Low wages

The wages received by the weavers under all the projects was pitifully low

8. Supply of improved implements

The supply of improved implements is intended to modernise the looms. But the achievement was very low leading to low production and low earnings to weavers.

III. Development of skill through training.

9. The efforts made by the Projects in arranging suitable training for weavers were very inadequate

IV. Qualitative improvement in products-targetted facilities not created

10. The only common facility Centre started was at Chirackal, Kanmnur. The weavers are not taking the full advantage of this facility. The Service Centre has to be further expanded by the installation of additional machinery for rotary printing and processing of Polyester fabrics.

V. Clusters and Procurement Centres - Beneficial to weavers

11. Yarn and other weaving accessories were provided to weavers in the clusters of weavers identified. The cloth produced by the weavers was procured by the Handloom Development Corporation to be marketed through its Sales Depots. This programme though implemented in a limited scale, was found to be of great help to weavers.

VI. Co-operativisation - targets not achieved

12. All the three projects have failed in organising the targeted number of societies. Even in the case of societies started functioning there was heavy loan burden on them from which they may not come out easily.

VII. Deviation from guidelines

13. The guidelines issued by the Government of India stipulates the conduct of a handloom census, minimum outlay on buildings, low expenditure on establishment and utilisation of major portion of funds for modernisation. The Handloom Census was conducted and the "The Census of Handloom, 1976" was published. In the other cases the Project deviated from the guidelines.

Suggestions

1. Continuation of Projects - Unwarranted

1. Continuation of Projects

It is suggested to terminate further implementation of the Project at this stage and to cancel the agency system followed for its implementation. The handloom Development Corporation may be instructed to supervise all the institutions aided under the Project until the loan liabilities to it are cleared in full.

2. Further action not necessary in the case of societies not yet registered

Out of the 31 factory type 100 loom societies, three societies are yet to be organised and registered. It is not necessary to pursue efforts for the organisation of these three societies.

3. Urgent steps required for the speedy commencement of production in the case of societies already organised.

Out of 31 societies envisaged originally 15 societies started production and 13 societies were at various stages of commissioning. The Handloom Development Corporation has advanced large amounts of loan to these societies. So suitable measures are to be taken immediately for the speedy commissioning and commencement of production of these 13 societies.

4. Revamping societies which have started production - an urgent need

There is a high percentage of underutilisation of looms already installed in the 15 societies which have started production. The handloom Development Corporation has to play a more active role in the matter of canvassing orders and supply of yarn and other weaving accessories to these societies.

5. Extension education - urgently needed

Even the Common Facility service Centre at Chirackal, kannur is not being utilised by the private weavers for whom it is intended. They still follow the unscientific and uneconomic methods of textile processing.

A lot of extension education is necessary to create an awareness among the weavers about the scientific methods of processing which will enable them to produce quality goods.

6. Expansion of common Facility service Centre at Chirackal - a necessity

The common Facility Service Centre at Chirakkal does not have facilities for employing latest technique of textile processing. Hence it is of utmost importance to expand this Common Facility Service Centre at Chirakal by installing upto date machinery to cater to the expanding needs of the handloom industry.

7. Clusters and Procurement Centre - more of them to be organised

The clusters of weavers and procurement centres was found to be of much help to the weavers. Hence it is desirable to identify more such clusters of weavers and open requisite number of procurement centres.

This will lead to large financial commitments. An expansion of the capital base of the Handloom Development Corporation may become necessary in the light of the expansion.

8. Export Promotion - A joint export promotion wing of HANTEX/Handloom

Development Corporation desirable

The Handloom Development Corporation and the HANTEX is not in a position to compete with the merchant exporters. So it is desirable to set up a joint export promotion wing of the Handloom Development Corporation and the HANTEX which can devote its attention exclusively for canvassing foreign orders and export of handloom textiles for ensuring their quality.

Training Scheme for Tribals in Pisciculture

Introduction

The training scheme for tribals in pisciculture was sanctioned by the State Government in October 1982. The scheme envisaged imparting training to person belonging to Scheduled Tribes for 60 days at the departmental fresh water Biological Station at Malampuzha. The selected tribals will be given training in fish culture, net making, net mending, fishing by different gears and some aspects of marketing. After the completion of the training the beneficiaries will be provided with a cast net for own use costing Rs 1500. 50% cost of the net was given as subsidy and the balance was to be repaid in 50 monthly instalments.

Objectives

1. To assess the real utility of the training programme as judged by benefits accrued to the trained tribals by way of incremental income and employment.
2. To determine the impact of the programme, if any on inland fish production, consumption and employment generation.
3. To study the nature of follow up undertaken by the Department of Fisheries in ensuring facilities for pisci-culture and fishing to the tribals who underwent the training programme.
4. To understand the problems faced by the trained tribals in practising pisciculture in their localities.

Methodology

Direct information was canvassed from all the 60 selected tribal trained at malampuzha. Besides the field survey, a series of discussions were held with functionaries of the Departments of Fisheries and Tribals Welfare and with other knowledgeable persons.

Findings

1. Wrong Selection of beneficiaries.

The tribals selected for the training had no previous background or expenditure in pisciculture. They had no water bodies in their possession suitable for pisciculture.

2. Facilities for fishing-inadequate

The implementing agency did not taken advance steps to allow fishing from the reservoirs situated in tribal areas. The trained tribals who attempted to fish in the reservoirs were chased away by the enforcement officials and the fishing nets of a few were confiscated. In fact the nets supplied were lying idle for want of facilities for fishing.

3. Supply of nets - injudicious

The implementing agency provided the trainees with a cast net and a gill net after the completion of the training without obtaining their consent. The insistence to supply both the nets to the trainees was a highly injudicious and uncharitable act since those who did not want the nets also became debtors.

4. Supply of gill nets - an after thought

Originally the supply of only a cast net was thought of. But when the training course was over the implementing agency was able to supply a gill net also within the ceiling amount of Rs. 1500. So it is clear that the cost estimation was not realistic.

5. Follow-up activities not envisaged

The lack of follow-up have contributed very much for the failure of scheme.

6. Recovery of loan - steps taken

No steps have been taken by the implementing agency to recover the loan instalments from the trained tribals.

7. No favourable impact on the standard of living of trained tribals

The increase found in the case of fish catch and number of days engaged in fishing was insignificant. Thus the implementation of the scheme failed to achieve the objectives of improvement in employment opportunities, income and standard of living of the tribals.

Suggestions

1. Reformulation of the scheme necessary

The implementing agency should have ascertained the existence of water bodies in their possession to practise pisciculture if selected for the training.

2. Facilities for training to be provided for the trained tribals

There should have been effective follow-up after the training. The tribals should be permitted to fish in the reservoir waters with full regard to the security of the dam and the preservation of the wild life in the area.

3. Cost estimates to be realistic

Sufficient care has not been thrown upon the calculation of estimates of the cost of the cast net.

4. Vessel needed for efficient operation of gill nets

For the efficient use of gill nets a vessel is highly necessary. So it is impressive that those who are allowed to fish in the reservoirs should also be provided with a suitable vessel for the economic use of gill nets.

5. Storage and marketing facilities to be provided

When the reservoir fishing progress the fish catch will increase. Consequently marketing of fish will become a problem. Tribal co-operatives may be organised to overcome the problems of storage, transportation and marketing of fish.

Housing Scheme for Rural Workers

Introduction

The scheme of Housing for Rural Workers is being implemented by the Board of Revenue through the Community Development Blocks. It envisages the construction of 40,000 houses during the three year period from 1980-81 to 1982-83. But only 11471 houses have been taken up for construction. The beneficiaries under the scheme were provided with Rs. 4000 each out of which Rs. 1000 is grant. The rural workers assigned with land under the One Lakh Housing Scheme or the scheme of provision of House Sites for Landless Workers in rural Areas, were eligible for the financial assistance under this scheme.

Objectives

- i. To assess the progress of implementation of the scheme
- ii. To estimate the cost of construction of houses at different stages and examine the level of utilisation of the funds.
- iii. To measure the scope of employment generation under the scheme and
- iv. To gain an understanding of the main problems in the implementation of the scheme and suggest remedial measures, if found necessary.

Methodology

Out of the 151 Community Development Blocks 15 blocks (10%) covering all the districts were selected by simple random sampling method.

Two percent of the total number of beneficiaries in each district was selected at random from the selected blocks. Primary data was collected by canvassing a questionnaire.

The secondary data for the study was collected from selected C.D. Blocks, Collectorates, Board of Revenue and the Housing Department.

The field work of the Survey was conducted during October to December 1983.

Findings

1. Assistance given to deserving persons

According to the scheme the family income of the beneficiaries at the time of selection should not exceed Rs. 4000. It was found that the benefits under the scheme have gone really to deserving persons.

2. Cost escalation and quality deterioration

Cost escalation had adversely affected the quality of the houses constructed. The average expenditure incurred for a house was Rs. 7851.

3. Locational disadvantage of house-sites

The house sites were away from motorable road. This has necessitated higher transportation cost of construction materials. Land development works was also necessary before constructing the houses. Thus the construction cost of a number of houses has increased due to locational disadvantage.

4. Financial Assistance - Inadequate

The financial assistance of Rs. 4000 is not even sufficient to the expenditure for roofing and other finishing works. The beneficiary had to raise additional resources averaging Rs. 3851 to complete the construction of the house.

5. Financial assistance - Fully secured

The financial assistance is given on the mortgage of the land and the house to be constructed. So the financial assistance by Government is fully secured. In spite of this the assistance was given in three instalments which caused inordinate delay in construction.

6. Injudicious Provision of financial assistance

Those who have already in receipt of the first instalment could not complete the house within 12 months as stipulated in the scheme. The reason was the non-receipt of the subsequent instalments. When funds were actually available it was used for giving the first instalment to fresh applicants. This has caused much hardship to the beneficiaries who already availed the first instalment and started construction.

7. Employment generation

If all the houses envisaged under the scheme were taken up for construction it would have generated 26.9 lakh mandays against the 5.48 mandays already created by the construction of houses.

Suggestions

1. Adequate allotment to be provided

Adequate allotment has to be provided so as to clear the backlog.

2. Quantum of financial assistance - Enhancement necessary

The financial assistance is to be suitably enhanced to cope with the escalation of prices of building materials and the wages. This will ensure quality of construction and minimum facilities.

3. Financial assistance to be given as lumpsum

In the light of the proper security for loan the amount of loan may be released as one lump. This will enable the beneficiaries to complete the house in a few months.

4. Bulk procurement and distribution of construction materials desirable

Where clusters of houses under the scheme can be identified it will be beneficial to have arrangements for bulk purchase and distribution of construction materials.

5. Low cost construction techniques to be adopted.

The beneficiaries under the scheme may be encouraged to adopt modern techniques of low cost construction since they are cheaper than the conventional methods. The engineering personnel at the Block-level may be exposed to low cost techniques of construction. Moreover masons and carpenters will have to be given on-the-job training in these techniques so that they will be able to learn and execute them efficiently.

PRIVATE VOCATIONAL INSTITUTIONS ASSISTED BY
HARIJAN WELFARE DEPARTMENT

Introduction

The Private Vocational Training Institutions in the State known as Private Industrial Schools impart training in non-engineering subjects to the drop-outs from Schools so as to enable them for taking up self employment or to get paid employment. Later on special encouragement was given for training the drop-outs belonging to Scheduled Castes, Scheduled Tribes and other eligible communities. The students belonging to these categories were given training free of cost with the aid of Harijan welfare Department. There were 380 Private Industrial Schools recognised by the Department of Technical Education in the State during 1983-84. Among these 113 Schools were receiving assistance from the Harijan Welfare Department. The present study is undertaken to assess the usefulness of the courses conducted by these Institutions and to suggest suitable measures for improving the functioning of these institutions.

Methodology

Study was conducted in two stages. In the first stage a sample of 25% of the total number of schools which are receiving assistance from the Harijan Welfare Department is taken subject to a minimum of one school for each grade and each district. In the second stage, to facilitate a comparative study, a sample of 10 schools from those not assisted by Harijan Welfare Department, but were receiving grant-in-aid from the Technical Education Department, was selected.

Findings

1. Concentration of Schools

More than 65% of the schools assisted by the Harijan Welfare Department are located in Thiruvananthapuram and the erstwhile Kollam districts. But these districts contain only 23% of the total SC/ST. In northern districts there were either no schools or the number was only nominal.

2. Importance given to tailoring group subjects

About 90% of the students were given training in tailoring subjects of which 96% are females.

3. Running additional divisions and collecting fees.

Among the selected schools, 39% were running additional divisions mainly in the tailoring groups and collecting fees from students admitted in them, encroaching on the facilities provided for stipendary students.

4. Instructors without prescribed qualification:

Ten percent of the instructors are not having the prescribed qualifications.

5. Inadequacy of machinery and equipment

Only 39% of the schools possess all the machinery and equipments required. In other cases the machinery and equipments are either damaged or used for teaching the fees paying additional students.

6. Lack of approved text books

There was no approved text books in accordance with the syllabus.

7. Delay in issuing continuance sanction

The delay in issuing annual continuance sanction has resulted in late admission, difficulty to disburse stipends and other concessions.

8. Government assistance not paid in time

Usually stipend was given in one instalment instead of two or three instalments, a long time after the expiry of the course. Assistance to managers were also not disbursed in time.

9. Administrative Supervision not effective

The arrangements for supervision made in the office of the Director of Technical Education was not at all effective. So Regional Offices may be started at appropriate places with sufficient staff.

10. Chances of duplication in payments

Grants issued from Harijan Welfare Department to those schools under its jurisdiction only after getting a declaration showing that they got no other assistance from the Director of Technical Education Department. Otherwise there is possibility of duplication and such cases were found in the survey.

11. Transfer Certificates not obtained from all students

It was stipulated that a T.C. should be obtained from all students at the time of admission with a view to prevent bogus enrolment. But this was not strictly followed.

12. Low remuneration for instructors

A majority of the instructors was getting only Rs. 200 or below as their monthly remuneration and it was not even given in time

13. Examinations not conducted in time

Even though the courses are over by March of every year the examination is conducted only in the following November-December and results published in ensuing February-March. The general complaint is that this delay in the conduct of examinations prevents a good number of students from appearing for them and even if they appear a large number fail since by that time most of them are out of touch with the subject.

14. Machine to be taken at own expense for practicals.

Since there is no provision to provide machines for practical examinations, students find it difficult to carry machines to the examination centres which may be at distant places

15. Low percentage of pass

The field survey revealed that the percentage of appearance was 63 more than the stipulated target of 50% and the percentage of pass was only 22 which is lower than the prescribed minimum of 25%.

16. Majority unemployed after training

Among the old students contacted, 75% were not employed in the vocation in which they were trained. The average monthly earning of those who were in the vocation in which they were trained was only Rs.307.

17. Non-engineering courses, not helpful in getting employment.

No agency in the State has come forward to organise the skilled persons in non engineering courses into any productive ventures. Hence these courses are not useful for getting job.

18. Demand survey for ascertaining the requirement of trained persons not conducted.

No demand survey to assess the requirement of trained persons was conducted before granting recognition to institutions.

Suggestions

1. Regular arrangements have to be made to claim and disburse the stipend every month.
2. Approved text books should be prepared in Malayalam and made available to all students.
3. In order to prevent students from attending the same course in more than one school admission should be given only after producing Transfer Certificate and fresh T.C. may be issued after completing the Training.

4. Arrangements should be made for supervision at all levels.
5. Examinations should be conducted immediately after the expiry of the course and the responsibility may be entrusted to the Controller of Technical Examination under the Directorate of Technical Education.
6. The Government Tailoring and Gorment Making Centres and Women's Polytechnics in the State may be made centres for K.G.T. Examination in tailoring group subjects. The sewing machines available in these centres may be made available for the practical examinations. All machines required for the practical examinations may be hired by the Controller of Technical Examinations.
7. A survey of demand to ascertain the requirements of trained personnel under different trades may be conducted before giving recognition to new Private Vocational Training Institutions and providing financial assistance to them.
8. The implementing officers of schemes for the benefit of Scheduled Castes and Scheduled Tribes should provide the initiative and leadership in organising the trained persons into productive enterprises.

Evaluation Series-51

Training Programmes for Scheduled Castes Conducted by Lal Bahadur Shastri Engineering Research and Consultancy Centre

Introduction

The Evaluation study on the training programme for Scheduled Castes candidates, conducted in the 'Year of Scheduled Castes and Scheduled Tribes' (1984-85) was undertaken by the Evaluation Division of the State Planning Board, as directed by the State Government. The Lal Bahadur Shastri Engineering Research and Consultancy Centre, Thiruvananthapuram (L.B.S Centre) organised this training programme for 350 scheduled castes candidates during 1984-85 for which Special Central Assistance of Rs. 22.01 lakhs was provided.

The training was given in four trades, viz., computer programming and console operation, Doll and toy making, Heavy duty vehicle driving and instrumentation services. The Junior Technical schools Adoor and Nedumanagad, Women's Polytechnic, Karamana, The Central Polytechnic Vattiyoorkavu, Maharajas Technological institute, Trissur, Regional centre of the L.B.S. Centre and the computer house of the L.,B.S. Centre were the Institutes where the training was imparted.

Objectives

The study had the following four-fold objectives

1. To study the present employment position of the trainees and to find out how far the training was helpful to get paid/self employment.
2. To ascertain the adequacy of the training programmes and manner in which the courses were conducted.
3. To assess the extent of placement services done by the L.B.S. Centre and
4. To examine the extent of utilisation of the amount of special Central Assistance made available to the L.B.S. Centre for the training programme.

Methodology

A simple questionnaire in Malayalam was prepared and mailed to all the 332 trainees to collect primary data for the study. The response was 84.3%. Besides, senior Officers of the Evaluation Division held discussions with the Heads of all the institutions which participated in the programme and gathered qualitative and secondary data required for the study. The field survey was from February 15th April 1986.

Findings & Suggestions

After the training 51 of the 80 candidates lost their prior employment. Only 13 persons (4.6% of the total number of trainees) got employment by virtue of the training they had undergone though altogether 32 persons got new jobs.,

The training programme could not realise its objectives because of the short duration, inadequacy of equipment for practical training and the pitfalls in the selection of candidates. The task of giving training was superimposed on institutions under the control of technical education. This resulted in not so satisfactory coaching to the trainees. The courses offered by L.B.S. Centres happened to be of low employment potential and hence to be discouraged by Government in future. The L.B.S. Centre not act as a central agency for the placement of the trainees.

The L.B.S. Centre had deviated from the Government directive in spending the amount of Rs. 22.01 lakhs sanctioned to it. The equipment and tools procured for the training programme are now with the L.B.S. Centre. Its future use to the benefit of the scheduled castes is yet to be decided.

Kerala Agricultural Extension Project

Introduction

The Kerala Agricultural Extension Project (KAEP) was first implemented in the Districts of Thiruvananthapuram, Kollam and Allappuzha in January 1981. It was later extended to all the districts in the State in December 1982. The project was aimed at achieving early and sustained increase in agricultural production through reorganisation and strengthening of the extension service. The main objectives of the project were:-

1. To ascertain the effectiveness of the transfer of technology to selected contact farmers and other farmers,
2. To assess the extent to which such transfer of technology has been adopted in to practice by the fellow farmers,
3. To assess the impact on production and productivity and
4. To identify major problems and bottlenecks encountered in the implementation of the programme and to suggest suitable remedial measures.

Methodology

A sample survey of contact farmers and non-contact farmers was conducted.

One Agricultural Extension Unit was selected at random from each of the 14 districts based on the agro-climatic zones.

Direct interview method was adopted using two proforma for collecting details from the selected 280 farmers. Proforma I for contact farmers and Proforma II for Non-Contact Farmers.

A Separate proforma was used for collecting information from 28 VEWS selected at random one each from the 14 districts.

Findings and Suggestions

Findings

1. The project has enabled more contact farmers to imbibe the new technology.
2. The percentage of partial adopters was more than full adopters and non-adopters.
3. The adoption of the recommended practices by Contact farmers with 'excellent' knowledge was low.

The low adoption of the recommended practices in the case of HYV paddy were due to high cost of seed, low sale price for paddy, non-availability of water for irrigation, financial difficulties and fear of pest attack.

5. The project was beneficial to contact farmers than non-contact farmers. This had been reflected in the increase in annual income of farmers from agricultural sources.
6. Viewed at the productivity angle, the project had little impact at the state level
7. The Agricultural Demonstrators advocated to improve basic agricultural practices with low cost.
8. It was reported that there were instances of changing contact farmers on account of unsatisfactory performance.
9. According to the Agricultural Demonstrators the major difficulties in implementation were the inadequate supply of inputs and the uncertainty in weather conditions.

Suggestions

1. Efforts will have to be made to modernise the extension service since it can play a crucial role in the transfer of technology to farmers.
2. There should be flexibility in fixing the jurisdiction of agricultural Demonstration on the basis of nature of crop and intensity of cultivation.
3. Efforts should be taken by the Agricultural Demonstrators to ensure timely and adequate supply of agricultural inputs.
4. Credit planning at the micro level should be given more importance to take up modern agricultural practices.
5. There must be steady market and assured fair prices for boosting up production of agricultural commodities.

Annexure

LIST OF REPORTS PUBLISHED BY THE EVALUATION DIVISION

STATE PLANNING BOARD

Series No.

1. **The programme for multiplication and distribution of improved seeds - An Evaluation study** (October 1969)
2. **Extent of adoption of improved agricultural practices -An evaluation study** (December 1969)
3. **Andoorkonam yela development programme - An evaluation study** (May 1970)
4. **Soil Conservation Programme in Kerala - An evaluation study** (June 1970)
5. **Minor irrigation works in Kerala - A Pilot evaluation study** (August 1970)
6. **Cost of cultivation of paddy - An analytical tool for evaluation** (April 1971)
7. **Evaluation of soil conservation work in Attumuttathu Thekkemathi Kayal area - A case study** (August 1971)
8. **Bench mark survey report on selected scheme area (Soil conservation)** (September 1971)

9. *Report on Intensive Agricultural District Programme in Kerala*
(December 1972)
10. *Interim appraisal of crash scheme for rural employment
in Kerala 1971-72*
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11. *Report on the utilisation of short term agricultural co-operative
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12. *Evaluation of soil conservation work in 'R' Block kayal area -
A case study*
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18. *An evaluation report on Oil Palm Station, Thodupuzha*
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36. *Small Farmers' Development Agency, Kollam* (October 1979)
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39. *Lead Bank scheme in Malappuram district* (November 1980)
40. *Integrataded Rural Development Programme* (October 1981)
41. *Farmers training programme* (November 1981)
42. *Intensive cattle development programme* (February 1982)
43. *Thonnakkal colonisation scheme* (December 1982)
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45. *Gramotsava programme in Munroe Thuruthu Panchayat - A case study* (January 1984)
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