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**SOME NOTES ON POSSIBILITIES OF DECENTRALISED  
DEVELOPMENT IN KERALA**

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*These notes have been prepared by different persons in consultation with each other, but with no effort made to present a co-ordinated point of view. They have been prepared for informal discussion of the issues to be examined and investigated further, and do not necessarily represent the committed positions of any of the persons concerned. The authors of these notes are: Thomas Isaac, K.P.Kannan, John Kurien, Sudipto Mundle, P.G.K.Panikar, K.N.Raj, and A.Vaidyanathan. They wish to acknowledge the help they have received from discussions with various persons in the State Planning Board and, while accepting full responsibility for errors, make no claim to originality in any of the views expressed.*

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## AN APPROACH TO DECENTRALISED DEVELOPMENT PLANNING IN KERALA

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Development planning in India has so far been primarily planning of the investments required for building up essential economic overheads such as in irrigation, power, transport, mining and heavy industry and social overheads as in education, health and scientific research. It is now a commonplace that the benefits of these investments have gone mainly to the top decile or two of the population; the condition of those in the bottom deciles has possibly even deteriorated. Since the reasons lie deeply embedded in the structure of the economy and its institutional framework, it would be unrealistic to expect any spectacular improvements through changes in the methods of planning or in the content of the development programmes. Yet there is some scope for improvements through (a) more careful selection and coordination of the investments directly or indirectly supported by the public sector, and (b) evolving organisational structures at different levels for promoting more broad-based and equitable use of their potential. Kerala has a relatively favourable social and political environment for efforts in this direction as well as the necessary technical and organisational skills, and therefore, with purposive leadership, it should be able to show somewhat better results (as it has been able to in the past in certain spheres). The proposed implementation of the legislation for setting up District Administration Councils, and the further decentralization of development activities through panchayats which it makes possible, offer an opportunity for considering concretely what can be done and how.

. It would be well not to assume in this context any significant increase in the scale of financial transfers to the State from the Central Government beyond what can be expected from the trends evident in recent years. The budgetary constraints so imposed could even become more severe if (as seems likely) inflationary pressures in the economy precipitate substantial cuts in the anticipated development outlay. This means that the efforts made for promoting a more broad-based development process will have to depend largely on the more effective use of the financial resources the State can count on within the existing framework and arrangements (including of course the additional resources that can be raised through financial institutions).

There is reason to presume that a more careful selection of the investments undertaken in the public sector at the State level, and some reordering, may itself help to provide part of the resources required. An examination of the pattern of development expenditure in Kerala's State Plans hitherto shows for instance that a little over 40 per cent of the total outlay has been on major (including medium-sized) irrigation and power projects. At the same time, if one were to look into the links between this investment and the additional output and employment it could have generated, particularly in agriculture and industry, its contribution to them seems unlikely to have been very large. This is not because Kerala did not need more water and energy for productive purposes but mainly for the reason that only part of the additional supplies now being made available are reaching where their potential contribution, both directly and indirectly, could be substantial.

In the case of the major and medium irrigation projects (which have absorbed about one-eighth of the total development expenditure in the State Plans), a serious limitation is that they have been focussed

almost exclusively on paddy cultivation (presumably on account of the priority attached to increasing rice production within the State). Since paddy accounts for less than 30 per cent of the gross value of the agricultural output in the State, much the greater part of the production in agriculture has been outside the purview of the investment on these projects.

Moreover (as pointed out separately in another note) most of the major and medium irrigation projects are located in the districts of Palghat and Trichur which account for only a little over one-third of the area under paddy. Even in these districts a large part of the supplies of water made available by these projects has been for the autumn and winter crops which have recorded only modest increase output; the main contribution of the projects has been therefore only to the summer crop, for which the additional supplies of water made available have been but a small part of the total supplies stored and supplied by them.

It is therefore clear that, if irrigation is to make a substantial contribution to agricultural output in the State (and the potential in this regard cannot be doubted since there is shortage of water for most crops over a large part of the year), there has to be a shift in emphasis both in the range of the crops to be covered and in the sources of supply from surface to groundwater. This implies also a shift in emphasis to minor irrigation projects, in regard to which development planning at the district, block and panchayat levels have a vital role to play not only in the identification of potential sources of supply of water but in its efficient utilization through cooperative arrangements among the users.

The case for a similar shift in emphasis is even more strikingly obvious in the case of power (which has absorbed nearly 30 per cent of

the development outlay in the State Plans of Kerala upto now). The policy followed hitherto has been to concentrate wholly on hydro sources of energy, presumably on the ground that the cost of generation of such energy in Kerala would be lower than from any other sources - without adequate attention to the ultimate uses, their spatial distribution, the relative capital costs of alternative sources of energy, or the costs of transmission. The result has been that (i) a large part of the hydro power generated is not yet usable within the State, and a little over two-fifth of the total power generated is being exported to neighbouring States (at a tariff rate of no more than 14 paise per unit); (ii) there is still considerable shortage of power in the northern districts of the State; (iii) of the power consumed within, nearly two-thirds is high voltage power for large industrial enterprises (located mainly in the Alwaye-Cochin region), to whom it is supplied at a rate of 19 paise per unit (compared to the rate of 31 paise per unit charged for domestic consumers); (iv) only about 8 per cent of the power consumed (and less than 4 per cent of all the power generated) within the State is medium and low voltage power supplied to the smaller industrial enterprises; (v) irrigation accounts for a still lower proportion (3 per cent) of the power consumed within the State; and (vi) despite the extension of rural electrification to all villages, the bulk of the rural households are not only in no position to utilize this facility but continue to depend, for their most essential energy requirement, either on kerosene (which is expensive) or on firewood (which has been also becoming more expensive and has in addition promoted extensive deforestation).

The case is therefore clear for a shift in the energy policy followed in the State in the last few years, again away from major projects for some time to smaller ones based on (i) hydro-sources with lower

heads (a very large number of which have been identified in neighbouring Karnataka with the help of students of engineering mobilised by its Council of Science and Technology); (ii) thermal sources which can be located more conveniently (and, though more costly to generate, involve lower capital costs, shorter gestation periods, and lower transmission losses); and (iii) bio-gas (which can be generated not only from human and animal waste but even agricultural wastes such as water hyacinths). Within the present system based on hydro-sources, the highest rate of return will now be obviously on investments in transmission designed to supply the available power on as wide a spatial scale as possible within the State and with minimal transmission losses (which now amount to well over one-fourth of the power consumed in Kerala).

Such a policy, to be effective and show perceptible results fairly quickly, will need to be backed up by a programme for extensive social forestry and animal husbandry, and with considerable scope for flexibility and experimentation since the varieties developed, the feeds used, etc. will depend on the conditions in each area. It will therefore not only fit in with decentralization of development activity but has the potential for generation of income and employment on a wide scale.

The availability of a forage and tree crop such as *Leucaena*, which has been used extensively in the Philippines for arresting deforestation, and has been found to be a prolific source for not only increasing supplies of firewood and charcoal and of animal feed but for improvement of soils (since it is a legume) and for production of pulp and paper, opens up a wide variety of possibilities in the sphere of social forestry. Since the shorter varieties (Hawaiian) grow rapidly (reaching a height of 15 feet within a year), and flower early (when 4 to 6 months old), the rate at which it can be spread is very rapid. Experimentation has also



shown that leucaena grows as rapidly in Kerala as it does in the Philippines.

The further development of animal husbandry poses more difficult problems, mainly for the reason that animal feeds are in short supply in the State. Those for which the feed requirements are large (such as cattle) cannot therefore be bred as rapidly as those for which they are less (such as pigs, goats and poultry). It is however possible to increase the supplies of animal feed not only through forage crops but by raising the yields of tapioca to their full potential and processing them (along with other necessary nutrients). Thailand exports nearly 12 million tonnes of tapioca to Western Europe for being processed as animal feeds; though land is less plentiful in Kerala and costs of production somewhat higher, the output of tapioca can be doubled in Kerala by application of more organic manure to the high-yielding varieties already available. It is the lack of demand for tapioca for human consumption when supplies of rice are relatively abundant, and the consequent fall in price, that now discourage efforts to raise yields; but, if a substantial demand for animal feeds can be built up and a system of processing and distribution organized within each area, it should be possible to increase output substantially without any significant increase in the area under tapioca. It needs to be also explored whether and how far other crops that are being grown in Kerala such as the 'winged bean', which is very rich in proteins (comparing well with the nutritional qualities of soya bean), can be used to improve the protein content in animal feeds. If a fairly large part of the feed requirements can be met in this way from local sources, and only some supplementing has to be done from ingredients imported from other regions in India, it should be possible not only to develop animal

husbandry on a more extended scale but in the process create also a feed processing industry designed to meet local requirements.

In fact, from a wider point of view, it would appear that it is the failure to build up such linkages between actual and potential increases in demand and the supplies that can be made available from within the State that has been responsible to a considerable degree for income and employment not growing rapidly enough in Kerala. Though demand for all kinds of products has grown rapidly in the State in the last few years, particularly on account of the additional income from remittances from abroad, it would appear that it has been going largely into products made elsewhere. Since this is partly to be traced to heavily-financed advertisement campaigns designed to change consumer tastes and demand patterns, and this is an aspect of the present institutional framework, there are obvious limits to the extent to which it can be corrected. But there has also been a serious failure to take the measures necessary for meeting the growing demands from within.

Some promising starts can perhaps be made now through appropriate organization and investment at the local level in the rural areas. There is much to learn in this respect from the experience in the Punjab, where livestock development, vegetable gardening, etc. have been promoted successfully along with a number of agro-processing industries for meeting the growing demand for intermediates as well as for consumer products.

Apart from those mentioned above, there are various other fields in which organisational effort at the local level can help significantly to meet already existing demand. Two of these deserve particular mention: inland fisheries (on which there is a separate note) and cashew cultivation. While shortage of nuts has been the main bottleneck in the

cashew processing industry, and increased supplies would help to increase employment substantially, the progress made so far in increasing the output within the State has been poor. It is clear however that there is scope for doubling the yield in Kerala, provided adequate attention is given to periodical and timely spraying of all trees in a locality for protection against pests and by timely application of fertilizers. It has also been found that there is still scope for extending the area under cashew (without adversely affecting other crops), particularly in the northern districts of the State; and that, moreover, small holdings would have some substantial advantages over the larger ones in regard to prevention of pilferage and timely collection of nuts (along with the fresh mango which could then be used to make 'cashew fenni' as in Goa), once the spraying requirements are taken care of by cooperative arrangements among the growers on a larger scale. It should therefore be possible to increase the internal output of cashew very substantially through such arrangements at the local level (which can then also be made a useful channel for marketing the supplies to the processing units).

It is clear that, in the cashew processing industry (as in other agro-industries like coir), various improvements have to be made both at the technological and organisational level for them to be able to sustain the present levels of employment at the existing wage rates. For creating the environment necessary for making these changes it is however vital that the supplies of the raw material are reasonably adequate and the levels of employment within the industry (as well as in other spheres in the locality) are raised to the maximum possible extent. When the supplies are short and unemployment is acute, the concerned mercantile interests as well as the employers (who are usually very closely associated with each other) tend to have the upper hand,

and not much can then be done even to ensure that the minimum wages are paid for such limited employment as is available. The steps which need to be taken for increasing the supplies of the raw material (the nuts for the cashew industry and coconut fibre for the coir industry) need to be therefore viewed as part of a much larger strategy for the generation of employment and minimum levels of income within the State, and given correspondingly high priority.

There is another sphere of activity, closely related in a sense to agro-processing, in which action of an anticipatory nature is called for. This is in regard to inland navigation. Inland canals, which were once the main arteries of communication in Kerala, have been neglected over the last few decades on account of the growth of road and rail transport. (The total development expenditure on inland water transport in Kerala's State Plans has been only about Rs.3 crores over the last two decades and a half). *With the rising costs of energy it is evident* however that a return to the use of inland canals on a wider scale will not only become obviously more economic but essential (as can already be seen from the policies now being followed in Europe). Since Kerala has the basic infrastructure it is in a relatively advantageous position, but substantial efforts are needed to overcome the effects of past neglect and to enlarge the capacity needed for meeting new and growing requirements. This will necessarily have to be spread over a period of time, possibly a decade or two, but the case for making an immediate start is very strong. Improvement of inland canals and of the boats used for plying on them has a large and widespread employment potential, and this is another reason for giving it high priority in the present context. Though the preparation of a master plan for their development adequately oriented to a future needs will take time there are already schemes prepared for

inclusion in the Sixth Plan which could be taken up immediately. They range from a scheme to improve the section of West Coast Canal between Quilon and Cochin (which has not only high commercial potential but passes through important coir producing areas with high levels of unemployment), costing about Rs.3 crores, to another for setting up a dredger organisation at a cost of about Rs.5 crores; there is also enough information available for making a start on the improvement of other canals which are new part of the existing network.

All these potentialities for development activity, organised within a decentralised set-up for more broad-based generation of incomes and employment, have been outlined above with reference mainly to the sectors where they can be identified (though some reference has also been made in places to questions of location). Effective decentralised planning and organisation of such activity will however require demarcation of appropriate areas within which it will have to be done. For many activities, the appropriate area might be just what is covered by a panchayat (particularly since the geographical and population coverage of a panchayat in Kerala is larger than in most other States in India); for other activities the appropriate area might be that covered by a development block (consisting usually of about 4 to 5 panchayats); for still others it might be the district (or even the State). It will be necessary to make a suitable classification of this kind and so organize the available technical and administrative personnel that the essential horizontal links between them at each level are ensured even while maintaining the vertical communications that will have to be established between the personnel at each level for effective coordination. Comprehensive area development plans, appropriate to each level and fitting in with the plans at the other levels, can then be framed. This is the task ahead.

Since the District Administration Act has been passed unanimously by the State Legislature, and the elections at the panchayat level have been completed, the stage has been well set for further action. It is possible that the administrative and other arrangements necessary for implementing in full the District Administration Act will take some time, but a start can be made meanwhile, with the personnel already available at the panchayat and block level, for launching developmental activities of the kind indicated in this note. This can be done perhaps by making an initial annual allocation of about Rs.5 lakhs per panchayat on the average, devising some transitional arrangements for the allocation of this outlay being decided according to the preferences as reflected at the panchayat level, and through suitable directions being given by the State Government to the administrative and technical personnel for their implementation in consultation with the panchayats. At this rate of expenditure, the annual outlay at the panchayat level will work out to only about one-fifth or one-fourth of the total developmental outlay per annum at the State level. What is important to ensure however is that the departmental interests and loyalties of the administrative and technical personnel, which generally run along the lines of vertical communication and hierarchy within the present set-up, are not allowed at any stage to impede the entire process and make a decentralised development activity a pale carbon copy of what it could be.

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SOME ORGANISATIONAL QUESTIONS CONCERNING LOCAL  
LEVEL PLANNING IN KERALA

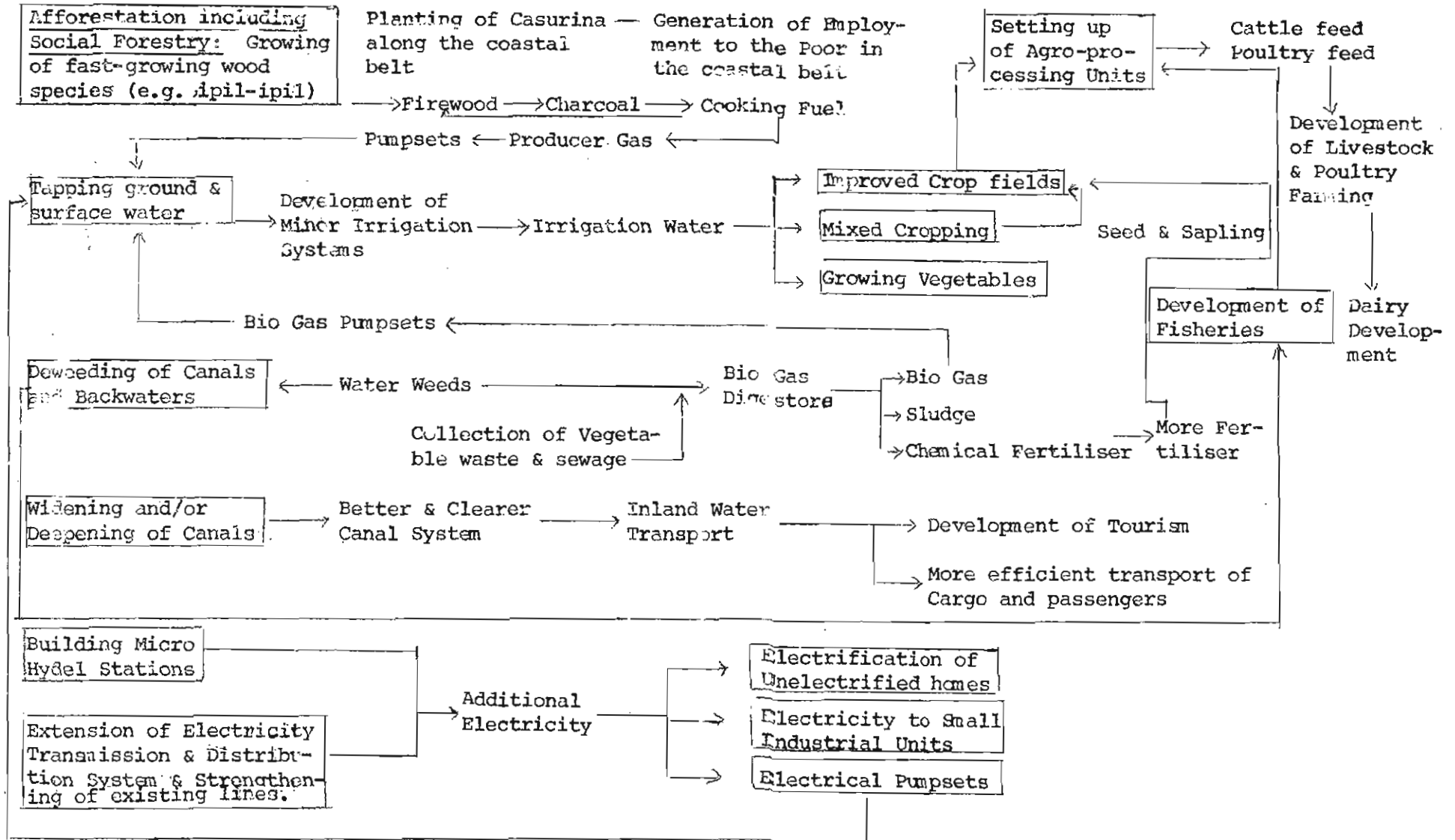
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The Approach

The point of departure for this note is that the basic rationale for local-level planning below the State level is already well appreciated. Much of the literature on the subject, both individual and official, usually incorporates a comprehensive list which is supposed to be taken up at the local level. This is not really very helpful, since the whole purpose of a planning exercise is precisely to set up priorities and choose some projects in preference over others. Time is of the essence and resources are limited. Everything cannot be done at the same time.

The approach suggested here therefore is to be selective rather than comprehensive, and concentrate on a relatively small range of inter-dependent activities which together have a high pay off in terms of quickly generating more incomes and employment on the basis of optimal exploitation of local renewable resources. A tentative scheme of such inter-related high pay-off, projects is suggested in the accompanying chart. Essentially the scheme is built around improving land use through more intensive cropping, higher valued crops, dairy and inland fishing; exploitation of surface and sub-surface water resources to meet the irrigation needs of intensive land use; decentralised generation of power from renewable

AN INTEGRATED DEVELOPMENT SYSTEM FOR LOCAL LEVEL PLANNING IN KERALA





resources, and the redevelopment of the canal backwater complex as a transportation-tourism industry. The detailed discussion of the economic and technical aspects of the projects has been taken up in other notes. This note is confined to some of the organisational implications of this approach and the required relationship between the administrative system, the political system and the people.

### *Organisational Implications*

Discussions on local level planning have often been preoccupied with the identification of some unique ideal level of planning. As the Dantwala Working Group Report on Block Level Planning points out, this is really a false problem, for such an ideal unit of planning neither exists nor is it necessary. In fact, the different economies of scale associated with different technical projects would require different spatial units such that the corresponding unit of planning may also have to be different.

A second false notion in such literature is the treatment of programme formulation and implementation as if these are two separable, sequential stages of planning. In reality, planning is an *iterative* process where the programme itself may undergo several modifications in the course of implementation. This needs to be kept in mind in the setting up of organisational arrangements for the design, selection and implementation of projects.

The points raised in the paragraphs above would suggest that the conventional procedure of moving from the formulation of overall plans

to individual projects needs to be reversed. We should instead start from the end use, and end users, of different projects - which would itself indicate the most convenient level at which the particular projects should be implemented. This would then indicate the most convenient organisational point at which different sets of projects should be formulated. We have to keep in mind here that information theorists and specialists in organisational design have repeatedly demonstrated that the delays in implementation as well as costs in terms of information handling, human and material resources are minimised when the organisational distance between the point of decision and the point of implementation is minimum.

One danger with the 'project to programme' sequence is that it tends to lose sight of the inter-dependencies between different projects in the programme - both in terms of technical relations as well as through the resource constraint. Each project is really one component of a larger scheme for the development of the socio-technical system as a whole in a given region. Each project therefore is worthwhile or not depending on the simultaneous implementation of the whole set of inter-related projects. Furthermore, the fate of different individual projects is also related through the resource constraint. There is after all only so much money to be spent on different projects in a given time period. Some have therefore to be chosen in preference over others. Yet, in the pruning and selection of projects, the basic technical balance between different projects, belonging to different levels of planning, needs to be maintained.

What is required therefore is a system of decentralised planning/implementation at different levels from the district downwards for different types of projects, each at its own appropriate spatial/administrative level, and yet a proper balancing and coordination between all

these projects at some point. As it happens, the new organisational structure of field administration envisaged in the Kerala District Administration Act (henceforth KDAA), read with the Kerala Panchayats Act (32) of 1960, (henceforth KPA), as amended in the light of the KDAA, corresponds rather well to these organisational requirements. Under the first schedule of the KDAA, all subjects related to rural development, along with a number of other subjects, have been transferred to the jurisdiction of District Councils. These Councils may in turn delegate those subjects which they deem fit in the jurisdiction of development blocks, which are already a part of district administration under the national extension scheme. Meanwhile another set of activities had been already delegated to the Panchayats under Section 57 of the KPA.

The Panchayat-Block-District structure thus offers a convenient multi-level planning system where projects can be taken up at their technically appropriate level, possibly with some rationalisation of the allocation of subjects between District Councils, Blocks and Panchayats. At the same time, the KDAA and the KPA together also make adequate provisions for vesting control of the overall development activity of a district with the District Council. This ensures that the necessary technical balances between projects taken up at different levels will be maintained, as also the appropriate priorities in project selection within the overall resource constraint.

The question of resource constraint brings us to the problem of financing the set of projects taken up for local level development. Under section 50 of the KDAA, the State Government is to transfer through grants the necessary funds for projects and schemes covered by the transferred subjects. In addition, the District Council is

empowered to collect certain fees, accept donations etc. to augment the District Council Fund. The Panchayats are empowered by the KPA to raise resources through certain minor levies and taxes. The District Councils and the Panchayats are also empowered to raise certain loans from the State Government under the provisions of the Kerala Local Authorities Loans Act (30) of 1963. The important question that arises now is whether this Act or any other act restricts the powers of the District Councils and Panchayats to raise loans from financial institutions such as the Agricultural Refinance and Development Corporation. (ARDC). It is envisaged that a large number of the projects which would come up in the scheme outlined earlier would be bankable projects which the financial institutions may agree to finance. If this is possible within the provisions of the relevant Acts, or made possible through amendments, then clearly the resource constraint would be considerably loosened. A much larger group of projects, with correspondingly larger potential for generating income and employment, could be taken up simultaneously.

Also to be considered here is the possibility of adopting the 'labour-cum-development bank' concept (which was experimented with in the Ernakulam district from 1973) on a much wider scale. It will be recalled that one of the reasons for initiating this experiment was precisely to promote local initiative and make it somewhat independent of resource constraints bureaucratically imposed from above. (The reasoning underlying the concept of labour cum development banks, and a brief assessment of the experience, will be evident from the attached appendix).

## *Administration and Local Government*

So far we have confined ourselves to the kind of internal organisational arrangements required within the administration to make it functional for the kind of local level planning envisaged. It has also been indicated that the required arrangements by and large correspond to those which have been envisaged in the KDAA. However the fact is that the KDAA is not yet on the statute books. It is necessary therefore to examine what is the existing institutional arrangement available for local level planning, in specifically what ways this would be modified under the KDAA, and what possible interim steps need to be taken till the Act comes into force in order to launch some local level programmes straightaway.

In this context it is necessary to recognise first a distinction between administration, the hierarchy of executive officers who implement the policies of government, and the government itself i.e. the politically elected representatives of the people who function as law makers and policy makers at the helm of administration. As of now, below the State Government level, there is no government (as distinct from administration) at either the district or block/tehsil level. Local government exists only at the Panchayat level, but even here the executive and financial powers of the Panchayats are so limited under the KPA of 1960 that local government is more nominal than real.

For instance, the principal function of the panchayat under section 97 of the KPA include only items like maintenance and lighting of local roads; drainage, sanitation garbage disposal and provision

of public latrines; arrangements for petty irrigation, potable water, burial, and registration of births and deaths; maintenance of village courts etc. For the major developmental activities like agriculture, animal husbandary etc., or even social services like education and health, the role of the Panchayat seems to be merely that of lending its cooperation to the concerned departments of the State Government.

Even for its few functions the executive authority of the Panchayat is actually very limited. A careful reading of the provisions of sections 33 to 55 of the KPA suggests that, while the day to day functioning is controlled by the executive officer of the Panchayat, an officer of the State Government, the overall functioning and performance of the Panchayats is also monitored and controlled by State Government officers viz. the Director and Deputy Director appointed for the purpose under the Act.

In the matter of finances again it appears that the Panchayat has the powers to collect only some minor taxes as provided under section 66 to 76. In expenditure also it is clear that close budgetary control and scrutiny is to be maintained by the Director and Deputy Director appointed for the purpose by the State Government under sections 77 to 80.

In other words, given the existing executive and financial arrangements under the KPA, the basic planning and implementation responsibilities for development at the local level actually remain with the government at the State level. It would perhaps not be feasible to mount significant local planning efforts without substantial modification of these arrangements.

As already noted earlier, the new system of arrangements envisaged in the KDAA does provide for such wide ranging rearrangements by bringing in a new level of government (as distinct from administration) at the district level and by effectively delegating developmental responsibilities to the popularly elected District Councils.

The matters and subjects vested in the District Councils under the KDAA, in its First Schedule, includes not only the Administration of Land Revenue but also all the major developmental activities such as Irrigation; Social Conservation; Agriculture; Cooperation, Credit & Local Resource Mobilisation; Animal Husbandry, including Gobar Gas Plants, Dairying & Fisheries; Social Forestry; Marketing; Household and Small Industries, Rural Roads & Inland Water ways; the Community Development Programme, the Minimum Needs Programme & Housing. Social welfare programmes like Health & Hygiene, Education, Harijan Welfare and Social Reform Activities are also included in the First Schedule. The remarkable correspondence between the subjects coming under District Councils and the integrated system of local level development projects envisaged in the system design presented earlier will be evident.

Furthermore, under the KDAA, these subjects are delegated to the District Councils not only nominally but also effectively by placing the entire district administration, from the Collectorate downwards, under the control of the District Councils as indicated in sections 31 to 35 along with sections 44 to 48.

This entails a far reaching transformation of the system of field administration, but such transformation calls for adequate safeguards. These are also provided for in the Act. And important

element of caution is introduced under the very first section which allows a staggered enforcement of the Act both in terms of the provisions of the Act as well as the geographical areas where it is introduced. This would ensure the necessary 'testing period' to see how the Act works. Secondly, law and order is not delegated to the District Councils, except in so far as police officers are required to extend their cooperation and assistance to the Council and its President or Secretary under Section 97 of the Act. Substantial direct control over the District Council is also retained by the State Government under sections 61 to 72, including the powers to supersede a District Council in the event of its default and sustained malfunctioning. These controls are further reinforced by section 17, which empowers the State Government to appoint an Administrative Committee in the event of a majority of the members of the council not getting elected, and by sections 83 which empowers the State Government to settle disputes between District Councils and other Local Governments.

Further safeguard is provided in the financial arrangements envisaged under section 49 to 60, in that the District Councils will apparently have to depend primarily on grants from the State Government (and which would be suitably monitored) for the discharge of the functions of the District Councils. As already noted, it is not clear how much resources the District Councils are empowered to raise independently through loans from the ARDC etc. either under the KDAA or the provision of the Kerala Local Authorities Loans Act (30) of 1963. It is however *worth considering whether this particular safeguard may not undermine the whole purpose of decentralised administration and development from below.*



The safeguards notwithstanding there is no doubt that the KDAA, if implemented, would bring in vast changes in the organisational arrangements of field administration. Consequently, when the Act is implemented, it may have to be brought into force in a staggered manner. Furthermore, in addition to some thirty related amendments in other acts under the Fourth to Thirty Fourth schedules of the KDAA, a large number of rules and regulations will need to be worked out in detail particularly with reference to personnel administration. The working out of such details, ratification of the Act by the President of India, and other related procedures are all likely to take time. In short, we may assume that in the immediate future the arrangements envisaged under the KDAA will not be available as the framework for local level development planning. At the same time, we have seen that the kind of arrangement prevailing now and the limited powers of the Panchayat under the KPA cannot really accommodate the kind of planning at the local level which is under discussion. It is suggested therefore, that pending the implementation of the KDAA, sufficient executive and financial powers may be delegated to the Panchayats by a Cabinet Order as an interim arrangement which would make possible the immediate initiation of action for integrated development activity at the local level.

Finally it should be obvious that the very basis of such local level activity requires direct participation by the ordinary citizens in the formulation and implementation of programmes. To make such participation effective it would be therefore useful if mass organisations and voluntary agencies are associated directly with such efforts right from the outset.

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## IRRIGATION, TECHNOLOGY AND PRODUCTION OF RICE IN KERALA

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Expansion of irrigation and the introduction of high-yielding varieties of rice were the two major recent developments which could be expected to initiate an era of sustained growth in rice output. The impact of the latter, of course, would depend upon the adequacy of the former.

Irrigation has claimed a significant proportion of the total plan outlay of the State. Major irrigation projects account for more than two-thirds of the total expenditure on irrigation. By the end of the Third Five Year Plan, ten major/medium irrigation projects were completed, and an equal number of similar projects have been taken up during the Fourth Plan, though not commissioned till today. Of the ten such completed projects, five are located in Palghat district and four in Trichur district. Has the rice crop of the Palghat - Trichur region done much better than in the rest of the State where it depends on minor irrigation to supplement the rains? Though no categorical assertion can be made either way, some fragmentary evidence suggests to the contrary.

Between early sixties and mid-seventies, the production of rice in Palghat went up by 33 per cent, at a higher rate than in all other districts. Palghat has also registered the highest yield increase. Almost all the major irrigation project here were commissioned since 1966; since the mid-sixties the output has increased by 19 per cent. Trichur

shows a poor record even compared to the districts where there has been no major irrigation project. (see attached Table).

The seasonal cropping pattern is a crucial determinant of yield rate in rice. Generally, the average yield of Punja (summer crop) is higher than Mundakan (winter) and Virippu (autumn). Thanks to certain genetic characteristics, the difference is sharper in the case of the high-yielding varieties. Despite this proven yield differential, there has been no significant increase in the proportion of area under Punja. Between the early sixties and mid-seventies, the proportion increased by a mere 2 per cent in the State as a whole of from 9.7 to 11.7 per cent. As of 1975-76, Punja crop accounted for only 4.5 and 13.7 per cent respectively even in Palghat and Trichur. In this region, as in the rest of the State, the rainfed Virippu and Mundakan crops dominate the scene.

The HYV seeds do not seem to have made much head-way in the State; the proportion of area under the HYV is only a little over a quarter of the total gross area under rice. The proportion was even less in Palghat and Trichur. Apparently, the major irrigation projects of this region have not been in a position to supply water for a summer crop, which alone offers the conditions required for bringing out the best genetic potentialities of the new seed varieties.

The major irrigation projects seem to have made little impact on the seasonal pattern and intensity of cropping or on the adoption of the new seed varieties and the associated technology. Such projects are characterised by high cost and long gestation periods. The question, therefore, is whether we should go on for more and more of such large projects or look for alternative options in irrigation which could involve greater local initiative and participation and generate more employment.

	<u>Completed major/ medium irrigation projects</u>		<u>Index number (1960-63 = 100) as of 1973-76</u>		<u>Percent of total area under rice as of 1975-76</u>			<u>Percent of area under H.Y.V. 1975-76,</u>	<u>Percent of net area sown more than once 1973-76</u>
	<u>Number</u>	<u>Ayacut area (in hectares)</u>	<u>Production</u>	<u>Average yield 1973-76 Kg./ha.</u>	<u>Virippu</u>	<u>Mundakan</u>	<u>Punja</u>		
Palghat	5	35828	132.82	1906	49.64	45.78	4.58	24.27	35.43
Trichur	4	35893	120.91	1299	37.06	49.18	13.76	22.51	58.71
Trivandrum	1	11600	103.23	1175	46.41	46.73	6.85	15.66	62.65
Quilon	..	..	115.51	1537	46.87	48.74	4.39	12.51	65.40
Alleppey	..	..	122.11	1504	30.17	50.09	19.74	52.68	53.69
Kottayam	..	..	141.26	1702	27.25	34.55	38.20	50.08	54.77
Ernakulam	..	..	132.26	1380	46.99	42.49	10.52	23.40	28.59
Kozhikode	..	..	107.09	1077	26.48	54.84	18.68	20.14	31.89
Cannanore	..	..	125.78	1347	51.34	37.37	11.29	19.62	11.65
Kerala :	10	83321	123.93	1490	42.81	45.25	11.94	26.27	36.03

Note: The production estimates have been made after redistributing the area under rice in Idukki and Malappuram on the basis of the ratios of land lost by Kottayam and Ernakulam, and Kozhikode and Palghat respectively. Total production after this readjustment is derived by applying the yield rate, season-wise, for the concerned districts as obtained during 1973-76.

Source: Bureau of Economic and Statistics, Statistics for Planning, 1977, and Season and Crop Reports 1973-74 to 1975-76.

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## IRRIGATION

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Kerala, with an average annual rainfall of 2500 mm is among the "high" rainfall tracts of the country. But, as in most other parts, the bulk of the precipitation is concentrated in the monsoon season lasting from June through October, extending in places through November. During the monsoon there is no dearth of water for crops. There is in fact too much water which makes the control of soil moisture for optimum growth of crop extremely difficult.

While improvements in drainage can help to increase agricultural production in some parts of the State, there are both physical and economic limits to what can be done to improve water control during the monsoon. But from December on, the natural precipitation is on the average well below crop requirements and also apparently far more erratic. The yield of the winter paddy crop can be affected by inadequate or untimely rain during the tail end of the season.

General, rainfall in the southern districts, though lower than average, are better-distributed, with nearly a quarter of it occurring in the period November-April. As one moves northward, the average as well as the degree of concentration increases. Thus, in Cannanore, only 6 per cent of the rainfall is received between November and April. This emphasises the greater need for summer irrigation in northern districts.

Irrigation development in the State has concentrated mostly on reservoir-based surface projects. There are at present 18 storage reservoirs with a capacity of about 3200 million cubic meters (mcm). The amount of water released from the reservoir is of course much larger but, since much of it is during the monsoon period, its contribution to output is marginal. It is the quantity made available during the dry season which makes a significant difference to yield and output. The extent of water used for dry season irrigation from these projects is not known. If we take the storage capacity as the upper limit of what can be made available in the dry season, the entire command area (200,000 ha.) should have more than adequate water (1.5 to 2 meter depth) for raising crops in the dry season. But, in point of fact, the total area under summer rice is hardly 100,000 hectares (not all of it served by canals). While this is by no means conclusive, it does point to the need for a close look at the use of the existing irrigation systems during the dry season, with a view to finding ways of increasing the extent of irrigation water supply in this period and making efficient use of it. This consideration should also be important in designing future projects.

Minor irrigation works have received relatively less attention and resources in the State's programmes. This is particularly true of ground water. The potentiality for ground water development seems however considerable. The State Groundwater Department has estimated that, in Cannanore and Trichur districts alone, there is scope for using an additional 2000 mcm of ground water a year through shallow and deep wells. For the State as a whole, if we assume that 10 per cent of the annual rainfall goes to recharge ground water, the sustainable rate of exploitation would be around 7000 mcm. Ground water has several advantages: it gives much greater control over, and flexibility in, water application;

the losses in conveyance and distribution are much smaller than in canal-based irrigation; and expansion in irrigation capacity based on ground water, being less lumpy, takes less time than through canal-based systems. The last mentioned consideration could be particularly important in North Kerala, where the need for summer-irrigation is greatest and yet there is hardly any likelihood of significant increase in summer supplies from surface projects in the near future. Much greater attention to ground water development is therefore essential.

However, in order to mount a successful programme on a significant scale, it is essential to have more concrete knowledge of the specific locations where the potential exists, the scale of exploitation feasible, the costs involved, and, not the least important, the organisational medium for managing these works. Reconnaissance surveys of the kind done by the Groundwater Department for Cannanore and Trichur should of course be done expeditiously for other districts, particularly in the northern region. This needs to be followed up by detailed ground surveys of two types:

- (1) Measurement of water depth in wells, ela-by-ela, at the beginning and end of the dry season, to get an approximate idea of the potential for additional ground water exploitation in and around paddy fields. Since this requires relatively little equipment and skills, it offers possibilities for organisation of semi-skilled personnel on a mass scale.
- (2) Exploration for deeper aquifers, involving use of sophisticated equipment and requiring high level of skills in interpreting the data. The necessary equipment is however now available at a cost of Rs.10000 each, and three such units are already in the State; more can be obtained without much

difficulty, as they are manufactured in the country.

The major problem is to organise and train teams with the expertise necessary to handle this equipment (B.Sc is considered the minimum qualification) and, even more important, to interpret the data (which would require more specialized knowledge and experience). A pooling of the expertise in various organisations dealing with ground water exploration with that available in the Centre for Earth Sciences should however make it possible to launch a major effort in the coming year.

Development of groundwater sources and their utilisation raise another important set of issues. Where individual farmers have large enough holdings in compact blocks, such development and use can (and will probably) be undertaken on an individual basis. There may also be cases where a few farmers with contiguous land combine to construct and operate wells jointly. But such farms are very small in number. The vast majority of holdings are much too small and fragmented to permit economical ground water exploitation individually or in small groups. Even if the State provides the expertise and the resources needed for the development of the facilities, the proper use of the water will require cooperation between groups of farmers to decide who will get how much water, for what crop, and on what terms. The minimum necessary size of the groups will depend of course on the area, the type of wells, and the amount of water available.

The problem of local level organisation for use of scarce supplies of water is inherently difficult and considerable flexibility is needed to adapt the organisation to local conditions. In Kerala, as



in other parts of India, the efficacy of irrigation projects has been greatly reduced because of the failure to evolve such organisations. While the problem is inherently difficult, the experience of East and South East Asian countries (including Japan) shows that the difficulties, mostly of an organisational and political nature, are not insuperable.

It is also time to correct the excessive preoccupations with paddy in the designing and management of irrigation systems. Since most of the existing systems are designed to cater to paddy fields, there are severe limits to augmenting the supplies to crops on garden lands, even though the advantages of doing so are now well recognised. The requirements of garden crops must be explicitly taken into account in designing future projects. But, for reasons mentioned earlier, the use of groundwater (and other minor irrigation) seems much more promising from this point of view. The problems here, to repeat, essentially centre on how best to organise the development and use of this potential for the benefit of small and fragmented holdings.

There is also a question whether, even on paddy lands, irrigation should be developed for raising a third crop of paddy and whether alternative summer crops (e.g. pulses) should not be actively encouraged in irrigated lands. Pulses have several prima facie advantages; they increase soil fertility; they mitigate the disadvantages of continuous mono-cropping in terms of its potential for high incidence of disease and pest; they use less water; and the nation-wide shortage of pulses guarantees a lucrative market. If Kerala can produce summer pulses on even half the paddy lands, and get as little as one tonne per hectare, it would be possible to get half a million tonnes of paddy in exchange. The factors constraining the extension of pulse cultivation are reported to be

(a) inadequate knowledge of agronomic constraints; (b) the necessity for group effort involving sufficiently large blocks of contiguous paddy land to control the problem of cattle grazing; and (c) the high cost of ground water if it is to be developed and used on an individual basis. These questions need to be urgently examined with a view to finding out economically viable alternatives for summer cropping. It might also be useful to conduct a few field experiments in areas where conditions seem favourable.

The proper development and use of irrigation require, and offers rich scope for, mobilisation of local resources as well greater involvement of local institutions in planning and implementation — both of which are essential to make the slogan of decentralisation a reality. This is the more important because, without it, the possibility of providing water to small holdings and of its being used effectively is likely to remain very limited. And it is only when water is made available that the economic and social potential of the measures of land reform implemented in Kerala (particularly those relating to small tenant holdings) can be realized. It is therefore a challenging task for panchayats and other organisations involved in development activity.

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## COCONUT DEVELOPMENT

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Next to paddy, coconut is the single largest crop of Kerala. An estimated 700000 hectares (about 25 per cent of the cropped area) are under coconut and they account for roughly one fourth of the gross value of the State's crop output. Between the early fifties and mid-seventies, according to official statistics, coconut area has increased nearly 60 per cent. This expansion has taken place more or less spontaneously and almost exclusively out of the farmers' own resources. The Five Year Plans of the State, being primarily concerned with achievement of self-sufficiency in paddy, have paid relatively little attention to the development of other crops including coconuts. The Plans did have programmes for propagation of high-yielding and quick-maturing varieties; control of disease; and replanting of old trees. But these were altogether too modest in scale relative to the importance of the crop in the State's economy; and even these modest programmes apparently could not be implemented fully. The recently launched coordinated programmes for coconut development in selected areas marks a major departure, but still only a beginning.

The nature and magnitude of the task can be appreciated by the fact that the yield/hectare has steadily fallen over the past 20 years. The average yield per hectare of planted area in the mid-seventies works out to only 70 per cent of the level recorded in the early fifties, and around 85 per cent of the level in the mid-sixties. This decline cannot

Growth of area, production, and yield

	<u>1952-56</u>	<u>1962-66</u>	<u>1975-77</u>
1. Area (000 ha.)	444	568	696
(Index)	(100)	(128)	(157)
2. Production (million nuts)	3080	3310	3385
(Index)	(100)	(108)	(110)
3. Yield (Index)	(100)	(85)	(70)

be explained by the rapid expansion of planted area. Assuming that a tree takes 10 years to bear, the trees planted on the new area brought under coconut during the fifties and early sixties must have come to bearing in the subsequent decade. But in actual fact, against a 28 per cent rise in planted area between 1952-56 and 1962-66, the increase in output between 1962-66 and 1975-77 was only 2 per cent. This suggests that yield per hectare of bearing area has been falling. (All this on the assumption that the official statistics are reasonably accurate).

This is widely believed to be the result of two factors. First, the trees in areas already under coconut in the early fifties have become very old and have not been replanted. Since the yield decreases after a certain age, failure to replant old trees means a progressive decline in the yield per hectare of the area planted before the fifties. However, it is not easy to assert that this effect was so great as to more than offset the increased production from young trees planted after the early fifties which must be in the rising phase of yields. This depends on the actual age composition of trees at the beginning of the period, the actual rate of replanting, and the type of varieties using in replanting and now plantings. There is little information on these aspects. Nor has any serious attempt been made to compile them.

Another factor cited is the spread of disease. Two major diseases have been identified: one attacks the crown of the palm resulting in a progressive decline in yields and eventually the death of the palm, the other is a bacterial root wilt which seems to be associated with lack of drainage. The former disease is known to be mostly confined to Southern Kerala; the northern limit is around Trichur; and areas in North Kerala are said to be disease-free.

Clearly, checking the spread of disease and rehabilitating areas already affected must be important ingredients of any programme for coconut development in the State. Past experience in implementing these programmes has brought out several aspects of the problem: (1) because of the slow acting character of the disease, it is difficult to identify affected palms until very late, by which time the infection may have already spread; (2) the only known method of checking the spread seems to be to cut down the affected trees and to plant T into D varieties (said to be resistant to the disease) in their place; (3) apart from the difficulty of early detection of disease, one has to contend with the reluctance of farmers to cut down diseased trees which may be still yielding. The resistance is the greater in the face of lack of alternate crops which would give the farmer some income till the new planted trees begin to bear.

In order to overcome these impediments, it is necessary first to review the steps needed to speed up the implementation of the programme for creating a disease-free belt north of Trichur. Second, in the areas affected by disease, the exact location of affected trees must be identified through intensive field surveys. These surveys, which could also be the occasion to identify very old trees, are capable of being undertaken through local level institutions and organisations, and would provide

the basis for demarcating concentrations of trees which need replantation either on account of disease or of age within each village. Third, on the basis of these detailed surveys, integrated programmes for replanting have to be prepared with provision for the necessary credit, supply of seedlings, and technical advice on spacing and intercropping. In some areas, where the root wilt problem is due to lack of drainage, investments in improvement of drainage will also have to be specifically provided for.

Along with these steps, it is imperative to increase the supply of high quality seedlings. One of the major problems impeding the programme to create a disease-free zone north of Trichur is the extremely limited supply of T into D seedlings. Expansion of hybrid seedlings supply will provide a significant stimulus to replanting in general. Since these varieties yield in 3 to 4 years, compared, to the period of 10 years required for the traditional ones, the cost of replanting to the farmer is greatly reduced by using T into D; and, since yield per tree is much higher for T into D, it would also contribute to faster increase in yield per bearing tree and per hectare.

The production of seedlings is limited because it is a highly skilled, very labour-intensive, and hence costly operation. The capacity of the State farms being limited, alternative ways to increase the supply need to be explored. The following are some possible alternatives which need to be considered: (1) some suitable public sector organisation can lease in compact blocks in disease-free areas (i.e., in the Northern districts) from private holdings and undertake rearing of quality seedlings on its own; (2) organise such seedling production in designated private holdings, subject to close and careful supervision by the experts, supported if need be by a price premium for certified seedlings; (3) the State can

help local institutions and/or farmers' cooperatives, where they are properly organised, for undertaking breeding of seed coconut and raising nurseries under expert supervision.

The productivity of trees, which are not old or diseased, can be increased substantially and in a relatively short time through irrigation and manuring. There is in fact no better way of promoting broad-based growth of income and employment in the State than through such increase in productivity. Irrigation is however an essential precondition for manuring and other intense cultivation practices during the dry season, when the scope for increases in yield is particularly large. This is more true of Northern districts where lack of water is the primary problem and disease is practically non-existent. The nature of the problems involved and the approaches to solving them have been outlined in the section on irrigation.

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## FISHERIES

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Fisheries has always been recognised as a sector in Kerala's economy with potential for widespread employment generation; as a source of cheap and vitally required animal protein; and also as a big foreign exchange earner. Consciously, but often rather unintentionally, the fisheries development efforts of the post-1956 period have emphasised only the last factor. Practically all major development outlays can be either directly or indirectly traced to furthering this objective. As a consequence, the earnings from foreign exchange touched the Rs.200 crore a couple of years ago. Kerala's contribution to this is by itself a worthy achievement, but undoubtedly achieved at a huge financial cost and an immeasurable social cost. While the export thrust should continue, we need to examine other facets which were relegated initially to a second place and consequently almost neglected.

It may be added that many of the well-intentioned development programmes in fisheries met with failure, causing disillusionment and dissent among bonafide fishermen, primarily due to the usurping of these programmes and the benefits therefrom by the vested interests in the economy. The case of the fishermen's cooperatives is an outstanding example of this. The present social matrix remains much the same, and hence the need of the hour, short of a radical change in the organisation of the fish economy, seems to be for initiatives



which involve and affect positively a much larger section of the participants of the economy. These must be more decentralised, spatially more widely distributed, touching all activities related to the production, marketing and consumption of fish.

### *Augmenting fish production primarily for local consumption*

The expansion of our territorial waters to the 200 mile limit has thrown open the vast potentials of exploiting our deep sea resources: While it would be necessary to explore the possibilities of effectively tapping these resources in the most judicious manner, we have no evidence to show that marine species of the deep sea will serve as a less expensive source of fish for local consumption.

For some time to come it would seem that augmenting fish production for local consumption needs to be based on less capital intensive and lower commercial fuel consuming methods. The large numbers of underemployed, artisan-type fishermen and the low purchasing power of the bulk of the consumers are two of the prime considerations for adopting such an approach.

The bulk of the fish catch is from the small-scale, owner-worker type of operations using non-mechanised craft. Fair prices and readily available raw materials for the means of production are of crucial considerations to this sector. Measures such as state controlled supply of materials, particularly nylon for nets, will reduce the exorbitant prices paid for these by fishermen. The essential supplies distribution network in the coastal areas could be an effective channel for delivery of the goods where other more appropriate agencies are not functioning.

Credit facilities to groups of fishermen (of say 2 to 15 in number) organised on a group guarantee basis, at low rates of interest with repayments regulated on a fishing season-wise basis and stretched over a long period of time, should be considered. The nationalised banks and cooperative banks in the respective areas need to be persuaded to take the initiative for the same. Where no genuine fishermen's organisations exist, the groups could negotiate directly with the financial institutions. Subsidies and loans on a large scale for bonafide fishermen for wooden or fibre-glass boats, locally manufactured, and using diesel engines below 25 HP for gill netting operations need to be also encouraged.

Considerations need to be given in this context to (a) experiments in using a judicious technological combination of powered mother vessels (State-owned) to tug non-mechanised fishing craft to off-shore waters for fishing operations lasting 2 or 3 days; (b) concentrated attempts to improve the potentials of coastal aquacultural and pisci-culture in private water resources as well as in publicly owned enclosed water sheets; and (c) the feasibility of culture and stocking of fish seedlings in common inland waters presently fished by subsistence fishermen.

For all the above the implementing agencies should be the Department of Fisheries. The nationalised banks, cooperative banks and the concerned lead bank of each district must be made to take the responsibility for funding.

In this context it should be mentioned that mere organisation from above of village developments societies/welfare councils/

programmes (whatever be the name), on the assumption of village homogeneity, will become non-starters or tools in the hands of the vested interests. The process of planning for and formation of such people's organisations must be accompanied by a simultaneous process of awareness creation. Local bodies such as the panchayat, and organizations of the working fishermen, have to take the initiative in ensuring that information about these schemes is made widely known and they are implemented well. It would be the task of the functionaries of these local bodies and organisations to make the masses conscious of their responsibilities and their rights in relation to these schemes.

*Building of marketing infrastructure and assistance to participants involved in marketing*

Measures to improve the marketing infrastructure should really precede or at least go hand in hand with efforts to increase fish production. The development in marketing infrastructure for the past two decades has been specifically tailored to meet the requirements of the exportable species of fish alone. This has led to a bias and also a tremendous concentration of facilities in a few centres. There are several situations where production of locally consumed fish is constrained and/or curtailed primarily due to the lack of a commensurate development of the marketing facilities. Fishermen using mechanised boats, who would otherwise prefer to operate from their own villages, are forced to migrate to the centres where the possibilities of bulk disposals of their catch at better prices are possible.

Finances and subsidies for intermediate forms of fish transportation (auto-rickshaws, tempos) may be considered in coastal cities and municipalities. Encouragement to form fish transportation cooperatives composed of the present small fish distributors need to be also considered. These measures would ensure that increased production does not result in their marginalisation for want of the appropriate facilities to handle the larger catches.

Underutilised fish transport facilities of public organisations may also be leased out to wholesale merchants at competitive rates. Expansion of such facilities in the railway network will ensure a freer flow of hygienic fish supplies from areas of surplus to centres of demand.

In the major cities and municipalities there is need for better organised fish markets. In most cases a total reorganisation of their physical layout will be necessary to ensure quality standards and hygiene. Standardisation of the fish sales by weight alone will ensure fairer prices to consumers. A system of licensing of all wholesale fish merchants and market commission agents, with mandatory rules for maintaining proper records on their fish procurement and market arrivals, will help to 'regularise' the fish trade; these records must be subject to inspection by local authorities.

Small fish distributors have to be provided with bank assistance for their meagre working capital requirements. Subsidies for cycles could be considered. An identity-cum-licence token system can be envisaged for them, without which they cannot avail of these privileges.

For the moment, in the corporation and municipality areas, the provision of 'dickies' in buses for the transport of fish carried by women fish distributors will reduce their hard labour and also ensure that fish reaches the consumer faster and hence fresher.

The constitution of a Fish Marketing Board, either as a separate body or as a part of some other existing appropriate agency, needs to be considered. This should be a very decentralised body with Taluk/Corporation/Municipal Committees, primarily representing the broad interests of the consumers and the public. The role of the Board and its committees will be primarily to ensure that the required measures for the marketing of fish for local consumption are taken up by the appropriate agencies entrusted with the tasks. Where the tasks have been assigned, the Board's role will be to ensure their proper implementation and also provide feedback information. The Board should not be allowed to become another tool in the hands of the vested interests, but rather be a watch dog of the system.

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GENERATION OF INCOME AND EMPLOYMENT THROUGH  
DECENTRALISED PLANNING AND MOBILISATION AND  
PROBLEM OF WORKERS IN THE TRADITIONAL INDUSTRIES

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No realistic strategy for generation of income and employment can ignore the traditional industries sector employing as they do a significant portion of the work force. These sections, highly localised in certain regions, constitute the poorest strata of Kerala's rural population. They are characterised by severe underemployment, deplorable labour conditions, low productivity, low wage rates and low earnings. The development efforts have so far failed to bring about any significant change in the situation. This note suggests a strategy of generation of income and employment which involves a thorough reorganisation of these industries on cooperative basis and introduction of technological change that would increase the productivity of labour within the cooperatives. The scheme for modernisation is tailored to a programme of alternate rural employment generation coupled with all-out efforts to solve the problem of raw material shortages and sales promotion.

One main stumbling block to any realistic planning in this sector is the dearth of reliable data on almost any aspect of these industries. While firm estimates of employment in this sector are available (or possible to secure) for certain industries like cashew, for a number of other industries it is still a matter of dispute (e.g. coir processing) or a wild guess (e.g. fishing). Without going into the merits and demerits

of estimates we give below approximate magnitudes of employment, along with some specific features of the major traditional industries.

Industry	No. of workers	Percentage of workers		Areas of Cocentration
		Women	Men	
1. Coir				
(a) Processing	250-300,000	95	5	South Coastal Belt
(b) Manufacturing	15,000	5	95	Alleppey
2. Cashew Processing	100,000	95	5	Quilon
3. Beedi making	100,000	12	88	Cannanore, Malappuram and Palghat
4. Handloom	60,000	25	75	Cannanore
5. Fishing	200,000	30	70	Coastal Belt

These industries form the reserves where a part of the surplus rural population is accommodated. The influx of rural population into these industries for want of alternative employment has reduced the employment intensity severely, and wages to near-subsistence level. Today, even after the erosion of the cheap labour basis of the traditional low productivity techniques of these industries, due to unionisation of workers, it is not possible to modernise techniques of production because of the problems of labour displacement that it would cause. Introduction of coir defibering mills in the late 60's led to violent eruptions of rural discontent, and use of the machines had to be banned. Thus the technique of production has continued to stagnate at a low productive level in these industries.

With the emergence of militant workers' movements, there has been an increasing tendency to delegate production to smaller and smaller units where the strength of workers' unions is lower. In coir industry this tendency has led to a virtual demise of large scale production units and decentralisation of production. Capital is content to control production from outside through controlling the market outlets.

In industries like cashew, where such strategy was prevented, there has been a shift of production to neighbouring States where wages are lower. Besides, the chaos and shortages in raw materials markets and fluctuation or decline in demand in the product markets have aggravated the crisis. The parasitical merchants and middlemen, who are a part and parcel of any decentralised and fragmented production system, further eat into the subsistence earnings of workers. Thus it has been argued that, in spite of the unionisation, the workers in these sectors have suffered an erosion of their standard of living over time.

The above summary description of the nature of the crisis in the traditional industries suggests the need for modernisation of the traditional industries. But such possibilities are vitally linked to the development of alternative rural employment for the labour that may be displaced.

Thus our suggested strategy consists of the following elements:

(1) Reorganisation of the traditional industries on a workers' co-operative basis. The successful functioning of some of the co-operative attempts, like the Dinesh Beedi Cooperative Society,



points to the wide possibilities of such co-operative mobilisation of unionised workers to protect their level of employment and income. The functioning of the existing co-operative schemes needs to be evaluated and revitalised.

(2) The production co-operatives of workers should be linked to viable marketing institutions (co-operative or public-owned) that would preclude private middlemen, ensure the free flow of raw material and sales of products at reasonable prices, and avoid fluctuations. An all-out effort should be made for product diversification and sales promotion as well as for increasing the availability and collection of the raw materials.

(3) Introduction of technological change. A phased programme of appropriate technological change should be allowed in the cooperatives, especially wherever the productivity is low and drudgery is high. This would increase the earnings of the workers, increase the economic viability of the co-operatives with their higher establishment costs, and help them to compete successfully with the private sector.

(4) Absorption of the displaced labour due to the modernisation of production may be done partly through a kind of rationing of the available work within the co-operatives. The total earnings of the workers may not significantly decline because of the higher wages in the modernised sector, but the real solution lies in the generation of alternative employment which

should be localised in areas where modernisation is being effected. The lines along which this may be taken up have been indicated in other notes.

We emphasise that the solution to the present crisis in the traditional industries lies in the successful implementation of such a basket of programmes, which would reduce the employment pressure on the traditional industries and allow them to modernise.

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## EMPLOYMENT THROUGH PUBLIC WORKS PROGRAMME

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Public works programmes, involving construction activity, cover a wide range including irrigation works, widening and maintenance of inland canals, bunding, levelling and other measures of soil reclamation, construction and maintenance of roads, and building. They have high employment potential, but also high potential for profits being made legally and illegally. The introduction of new layers of government at the district and panchayat level should therefore be used not only to develop such public works programmes (carefully selected to prevent their degenerating into mere make-work programmes without any productive potential) but to prevent large leakages by way of profits.

The experiment with the Labour cum Development Bank in the Ernakulam District yielded a useful insight from this point of view. Most of the workers employed on the schemes financed by the Bank had been paid on a piece-rate basis, and the amounts payable were determined by the Public Works Department on the basis of its norms after due measurement. It was found that, though under the terms on which employment was being provided, the workers were required to leave one-third of their wage bill as 3-year saving deposits in the Bank (carrying a rate of interest of 9 per cent) and only the remaining two-third paid in cash, many workers were able to secure in cash a daily wage higher than that prevailing in the area at the time. This

could have been partly on account of the higher incentive offered to workers through the piece-rate system, but it was also perhaps to a significant degree on account of the high profit margins implicit in the PWD norms (which now accrued to the workers and not to contractors and various functionaries among whom they would have been usually shared).

It would be therefore useful to experiment, wherever possible, with contracts on open-tender basis given out to labour cooperatives (of workers), and payments being determined on a piece-rate basis; this will ensure that the employment generated creates assets that come up to the necessary specifications, make it possible for workers to earn the profits that would otherwise go to others, and give them adequate incentive to find employment through such cooperatives.

It needs to be mentioned perhaps in this context that an outlay of Rs.1 crore can generate employment for 4000 workers at the rate of Rs.10 per day as wage and 250 days of employment per annum. Political munificence at the State Government level is therefore better expressed through liberal grants for public works programmes at the local level than through additional ad hoc bonuses to all public sector employees (irrespective of their current income levels) as have been given for the Onam festival season!

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APPENDIX ON LABOUR-CUM-DEVELOPMENT BANK EXPERIMENT  
IN ERNAKULAM DISTRICT

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The proposal for experimenting with a Labour-cum-Development Bank in Ernakulam originated at the level of district administration, though some marginal technical assistance in formulating the details of the approach to be adopted and in choosing between the different schemes which the Bank might take up was given by the Centre for Development Studies. The account given below of the concept underlying this experiment, and of its actual functioning from July 1973, is taken from a study completed in the Centre in 1975 on Poverty, Unemployment and Development Policy: A Case Study of Selected Issues with reference to Kerala (published by the United Nations in 1976).

The essential features of the approach adopted, as it evolved in the course of 1972, will be evident from the following extracts from a brochure setting out certain perspectives on planning and development in Kerala in the context of the fifth five-year plan:

"The proposed Labour-cum-Development Bank is essentially very simple in its conception. It is a credit institution set up to meet the short and medium-term financial requirements of a group of panchayats that are entrusted with the responsibility of devising schemes which would offer employment opportunities for idle labour and at the same time help to increase output and income in the area

concerned. The panchayats are required to identify the beneficiaries of each scheme and be responsible for their paying to the Bank in instalments an amount that is considered reasonable in relation to the benefits secured. The labour absorbed in the schemes will be paid wages at the rates prevailing in the area, but it will be required to accept a part of it in the form of 3-year fixed deposits in the Bank carrying a rate of interest of 12½ per cent per annum on the average. Only schemes on which the wage cost is more than two-thirds of the total cost, and in addition meets the above conditions, will be approved and financed by the Bank. The initial financial requirements of the Bank are to be met by loans from the Government (out of the funds available for 'crash employment programmes'), but once a Bank proves its ability to become reasonably self-reliant by choosing the right kind of schemes and recovering from the beneficiaries the amounts due from them these loans would be regarded as part of the Government's contribution to the Bank's share capital; further financial assistance from the Government needs to be made available only to the extent that the Bank's scale of activity requires such assistance and to the extent that the mobilization of idle labour and of savings achieved by it calls for a legitimate degree of subsidy.

"The success of this experiment depends essentially on effective and purposive organization at the level of the panchayats for organizing investment and productive activity designed to meet local requirements. Since the population even in the rural areas of Kerala has achieved a high degree of literacy, and is capable of taking an enlightened approach to the problems they face (as has been amply demonstrated in their response to the family planning programmes), there are good chances of the experiment proving to be reasonably successful. The degree of political consciousness and organization which

exists in the State at this level is another factor that could contribute to its success. At any rate, these are the ways in which experiments need to be conducted for ensuring that public works programmes help to mobilize local resources for meaningful developmental activity and do not deteriorate into wasteful forms of dole distribution organized by an ever-burdened and highly centralized bureaucratic machinery.

"About 8 or 9 schemes have been identified for this initial experiment of which 4 or 5 are lift irrigation schemes and the rest are schemes for the construction of bunds on the backwaters for prawn culture. It also appears that the popular response to the scheme is quite encouraging. If the experiment shows reasonably good results very much more could be built into it. For instance instead of paying the deferred component of wages in cash after three years with the interest payment due on it, they could be converted into insurance policies of the kind that appear attractive to poor people. Alternatively, they could be given the choice of receiving the payment in the form of houses constructed for them. There are now available in the State various techniques of low-cost building that could be drawn upon for this purpose, and which in turn would generate additional demand for local labour and other locally-available resources.

"Labour-cum-Development Banks can also be utilized, with adequate support from the Government or other financial institutions, to build up the overheads required for creating agro-industrial market centres all over the State. In a region that is as commercialized as Kerala the development potentialities of such centres offering facilities for storage of products, supply of credit, fertilizer, and other such inputs, technical consultancy services, and for processing of various kinds is obvious. Similarly they could be made an important

agency for financing the setting up of retail shops organized by panchayats to make available rationed supplies of essential commodities at fixed prices. But, as emphasized earlier, all these possibilities depend on the ability to organize such activity with reasonable competence and efficiency and on public vigilance at the local level to minimize the scope for wastage and corruption. They also depend to a considerable degree on the political leadership being willing to accept and promote the use of democratic institutions for constructive purposes of this kind even while seeking to change the context and direction of social and economic development in the directions they believe in".<sup>1/</sup>

A preliminary evaluation of the working of the Labour-cum-Development Bank in the Ernakulam district, since its beginning in July 1973 up to the end of May 1974, has been prepared by the State Planning Board.<sup>2/</sup> The Centre for Development Studies has also been keeping in touch with the progress of the experiment and some of the relevant data relating to the period up to March 1975 have been collected. Nevertheless, it is still too early to attempt an adequate evaluation.

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<sup>1/</sup> K.N.Raj, P.G.K.Panikar and T.N.Krishnan, Some Perspectives on Planning and Development with particular reference to Kerala: A Preliminary Paper on the Approach to the Fifth Five Year Plan (Trivandrum, Centre for Development Studies, September 1972). Some of the earlier papers relating to the formulation of the proposal for setting up a Labour-cum-Development Bank have since been published. See K.N.Raj, "Employment creation through a Labour and Development Bank: a note" (January 1972), and S. Krishna Kumar, "Labour-cum-Development Bank" (February 1972), The Indian Journal of Labour Economics, Vol.XIV, October 1972-January 1973, Nos.3-4.

<sup>2/</sup> Kerala, State Planning Board, Evaluation Division, A Report on the Working of the Labour-cum-Development Bank, Ernakulam, Evaluation Series No.21 (November 1974).



Some of the general features of the Bank and its working since July 1973 may however be noted. It was registered in March 1973 as a co-operative with the whole of the Ernakulam district as its area of operation. The bye-laws of the Bank provide for three categories of membership: (a) beneficiaries of the schemes undertaken by the Bank (excluding those for whom the benefit is only in the form of employment provided at the stage of construction); (b) labourers who wish to be considered for employment on schemes undertaken by the Bank; and (c) institutions such as panchayats, other co-operatives, social welfare agencies and individuals interested in the working of the bank.

The authorized share capital of the Bank was fixed for the time being at Rs.2 million (with 8,000 shares of Rs.25 each for the first category of membership, 20,000 shares of Rs.5 each for the second category and 13,000 shares of Rs.100 each for the third). The total amount collected from the three categories up to June 1974 amounted, however, to only Rs.15,300 (with 301 members of the first category, 741 members of the second, and 21 members of the third, some buying more than one share each) the state government made a contribution of Rs.50,000 towards the share capital, thus making a total of Rs.65,300. In addition, upto March 1975, the state government made available to the Bank an amount of a little over Rs.0.65 million, Rs.0.26 million as loan and Rs.0.39 million as grant. However, taking everything into account, the total financial resources the Bank has been able to raise upto the present amount to less than one half of the allotment of Rs.1.5 million given by the state government to each district in 1971/72 for the crash programme.

Even before the Bank was registered, detailed investigation was undertaken by the district administration of nine schemes (in two development blocks within the district) which could be considered for

implementation by the Bank. The schemes were of three kinds: (a) pure lift irrigation schemes, (b) lift irrigation-cum-navigation and land development schemes, and (c) schemes for construction of fish ponds in shallow backwaters for prawn culturing. A preliminary evaluation of these schemes was carried out by the Centre for Development Studies on the basis of the information then available and by applying some rules of thumb. As a result, five of the nine schemes were initially selected for inclusion in a pilot project under the Labour-cum-Development Bank proposed by the district administration.<sup>3/</sup> On the basis of the report on this pilot project (submitted in September 1972) the state government decided to experiment with the Labour-cum-Development Bank. Considerable effort, it should be noted, had gone into the preparation and evaluation of the schemes to be taken up even before the decision to set up the Bank was made.

Soon after the Bank was registered in March 1973 some questions arose as to how the schemes selected were to be financed and, more pointedly, to what extent it would be necessary and/or appropriate for the Bank to subsidize them by not recovering from the beneficiaries concerned the full costs incurred on each scheme. These questions were examined and analysed in the Centre for Development Studies and some suggestions made to the district administration in a paper (see annex)<sup>4/</sup> The solutions offered were essentially in the nature of an attempt to reconcile practical considerations with analytically justifiable investment criteria, criteria,

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<sup>3/</sup> Labour-cum-Development Bank Scheme: Pilot Project for Rural Employment Campaign in Alengad and Parur Blocks of Ernakulam District (September 1972), prepared by S.Krishna Kumar, District Collector, Ernakulam. Four of these five schemes belonged to the first two categories mentioned above and were basically lift irrigation schemes; their total estimated cost was a little less than Rs.0.8 million. The fifth, for the construction of a fish pond, was estimated to cost over Rs.1.4 million.

<sup>4/</sup> N.Krishnaji, T.N.Krishnan and K.N.Raj, "Guidelines to financing of the schemes under the proposed Labour-cum-Development Bank" (April 1973).

in fact, which could be applied at the district level with personnel given some minimal training in project evaluation.

The total cost of the five schemes recommended in the report on the pilot project was Rs.2.2 million. The state government agreed to provide initial financial support for only the four lift irrigation schemes, estimated to cost a little under Rs.0.8 million.

After the Bank was set up it was found that the area that would be benefited by one of the lift irrigation schemes was smaller than had been estimated earlier; this scheme was therefore abandoned. A second lift irrigation scheme had to be abandoned after some initial expenditure due to what has been described as "factional strife" among the beneficiaries. The reasons, however, go deeper and, as will be evident from the following observation in the Evaluation Report of the State Planning Board, were very similar to what might be expected in schemes for development of agricultural land to which reference has been made earlier.

"There are some influential farmers in this project area who own pumpsets with surplus capacity. These farmers extend irrigation to the small farmers of the adjoining plots also and collect charges at the rate of Rs.100 to 140 per acre per crop. It is this vested interest that resulted in the non-cooperation of beneficiaries in this project area. Even those who had signed the beneficiary agreement refused to take shares in the Bank with the result that the Bank could not legally contract with them."<sup>5/</sup>

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<sup>5/</sup> A Report on the Working of the Labour-cum-Development Bank. Data on land distribution among the beneficiaries of this scheme had been collected earlier by the Centre for Development Studies to assess its likely effect on distribution of income in the area. According to these data, as they were processed, there appeared to be 145 households possessing in all about 155 acres of land distributed as follows:

There were thus only three schemes left which, according to revised estimates made towards the middle of 1974, were estimated to cost about Rs.0.3 million.<sup>6/</sup> Work on two was started in January 1974 and on the other towards the end of March of the same year.

By the end of February 1975 the expenditure incurred on these schemes amounted to a little over Rs.0.26 million, the wage component of which was nearly 80 per cent of the total. One of the schemes was completed

Contn. of footnote 5

Size of holding (acres)	Number of households	Total area (acres)
0.00 - 0.25	30	4.05
0.25 - 0.50	28	10.79
0.50 - 1.00	32	22.41
1.00 - 2.50	39	58.92
2.50 - 5.00	14	45.58
Above 5.00	2	13.00
	145	154.75

However, when the obstacles created by "influential farmers" were reported and the information collected earlier was closely scrutinized, it was found that the residential addresses given by several holders of land were the same in a number of cases. There is reason to believe that these holdings, reported separately by different individuals belonging to the same household, were really being managed as single operational holdings. When these individual holdings were aggregated the number of holdings was reduced to 100 and the data revealed a somewhat different pattern of land distribution, as well be evident from the estimates below:

Household (percentiles)	Share in total area (percentage)	
	Unadjusted data (145 households)	Adjusted data (100 households)
Bottom 10 per cent	0.97	1.29
Bottom 25 per cent	3.92	8.75
Top 5 per cent	21.93	27.61
Top 10 per cent	36.42	45.65

<sup>6/</sup> The cost of these schemes had gone up by more than two fifths compared to the earlier estimates, the increase being attributed partly to price rises and partly to improvements made in the design of the schemes.

in October 1974, another in December 1974, and the third is expected to be completed by April 1975. The area benefited by the first two has been estimated at about 175 acres and by the third at just over 100 acres (in all cases according to the returns submitted by the beneficiaries of these schemes).

If the mid 1974 cost estimates are not exceeded, the capital cost per acre of benefited area would work out to a little over Rs.1,200 for the three schemes together-below the limit of Rs.1,300 per acre fixed for minor irrigation works by the Public Works Department. It seems likely, however, that costs will be higher due to the rise in prices and wages in the intervening period; if for no other reason.

Most of the areas covered by the three schemes were hitherto growing two crops of paddy a year. Completion of the schemes has already enabled an additional crop to be grown in the area covered by one of them, and a similar increase in the intensity of use of land is expected in the area covered by the other two schemes in the course of the current year. In some areas it has only stabilized supplies of irrigation water for a second crop. In other areas only one crop was being grown earlier, and completion has made possible the growing of three crops. It is therefore clear that all these schemes have been not only productive but quick-maturing. Moreover, apart from the employment generated in the process of construction, additional employment of a more permanent nature has been created through the additional crops that could be grown annually.

Of the total expenditure of Rs.0.09 million incurred on the three schemes up to the end of May 1974, nearly one third (to be precise, 32.4 per cent) was accepted by workers as deferred payment in the form of fixed deposits carrying a rate of interest of 9 per cent per annum.

However, as prices rose rapidly in the course of 1974, pressures began to mount for release of these deferred deposits, and it became necessary to relax the original condition that these deposits should be held for a period of three years. Instead, workers were required to hold them for a period of only six months. Consequently, Rs.0.03 million, held already for six months or more, is reported to have been released in December 1974.

A special feature of the Labour-cum-Development Bank was a device for inducing some saving at the margin on the part of workers receiving higher incomes through employment. To the extent that such saving could be induced, it would be possible obviously to minimize the potential inflationary effects of a massive employment programme, particularly a rise in the prices of the most essential consumer goods an effect most generally feared. But the practicality of this device has seldom been demonstrated and, despite theoretical hypotheses about the social cost of labour being zero, or close to zero, in labour-surplus economies, it has not been found possible to induce workers to accept employment at anything less than the prevalent wage rate, or even to contribute to the investment programmes out of their savings from the incomes so created.

One way in which this rather crucial problem was tackled was by not offering anything less than the going wage rate, and even perhaps raising it if the creation of additional employment itself raised the wage level in the area. The predisposition in favour of slack-season wage rates—wage rates generally reflecting only distress conditions created in rural areas by seasonal contraction in employment opportunities—was therefore avoided (contrary to what happened in the crash programmes for rural employment proposed earlier by the Central Government and in several other schemes of this nature). The intention was rather to see whether workers could be induced to save a part of their additional

income. For if it was possible to demonstrate that workers would be willing to save more given appropriate incentives, the economic reasoning behind the case generally put forward for not offering high enough wages to those offered supplementary employment would cease to be compelling; in fact the higher the rate of such saving at the margin found feasible, the weaker would become the rationale for inequality of income distribution stated in terms of the need for raising the saving rate in economies of this kind.

Three ways were tried to make additional saving by workers at the margin easier. First, the work offered in the schemes taken up by the Labour-Cum-Development Bank was to be so phased that it would be available on a larger scale when there were no other employment opportunities in the area. It was also to be made clear that workers would not be bound to work continuously on the schemes if they should find more attractive employment in the meantime; the idea here being to ensure that the incomes generated would be, and also clearly recognized by the workers concerned to be, additional to what they could otherwise have earned. Secondly, according to the original conception, a rate of interest of 12.5 per cent per annum was to be offered to workers on their deferred wage payments held as three-year fixed deposits in the Bank. The rate was deliberately fixed at a level higher than the prevailing rates offered by commercial banks to depositors in general; this was intended to be not only an incentive to the holding of such deposits by the workers but a device for redistributing incomes in their favour. Thirdly, as indicated earlier, it was hoped that further inducement could be given to workers and the distribution of wealth and income shifted a little more in their favour, by linking the accumulation of such fixed deposits to specified levels in the Labour-cum-Development Bank with attractive

schemes for their conversion into desired assets, such as insurance policies, residential housing and even machinery and equipment of the kind needed by workers for creating self-employment through small-scale industries.

From this point of view it is unfortunate that the rate offered on fixed deposits by the Labour-cum-Development Bank was only 9 per cent per annum. It is also unfortunate that it became necessary to release the deposits of deferred wage payments after no more than six months. The latter was perhaps unavoidable in the special circumstances created by the rapid rise in prices of essential consumer goods in the course of 1974. It is just possible that a higher rate of interest offered on these deposits and the linking of other attractive schemes with the achievement of specified levels of such deposit accumulation might have helped in reducing the pressure for outright release. In any case, when the inflationary forces in the economy are checked, one must hope that experimentation along these lines can be pursued.

The evaluation on the working of the Labour-cum-Development Bank by the State Planning Board (which was completed before the release of the deferred wage payments) noted the following positive achievements of the project:

"Those who enlisted for the project work was reported to be mainly seasonally unemployed and under-employee hands. With the result, during periods of agricultural activities these labourers have shown a preference for work in the farms where they were able to earn higher cash wages. However, this has not adversely affected the progress of work as during off seasons more number of people were employed and more work turned out. The workers have accepted the



retention of  $1/3$  wages as they are able to earn wages equal to or slightly more than the prevailing Public Works Department wage rates since payments are made on piece rate basis enabling them to earn more by turning out more quantum of work.<sup>7/</sup>

"Local enthusiasm both on the part of the workers and beneficiaries have been noticed in the three projects under implementation. But the most striking aspects of popular involvement in the programme is the free surrender of land for the extension of the canal system mostly by non-beneficiaries of the Kadungallur scheme. It is specially noteworthy that 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 the case of these three projects. The credit for this partly goes to the good extension work which preceded the initiation of the programme in these project areas and partly to the overall involvement of the District Collector supported by the District Development Machinery."<sup>8/</sup>

Evidently, given the necessary inducements and safeguards, the workers had no difficulty in accepting the deferred wage system; and even donations of land were forthcoming from the community, though the contribution of the earlier land reforms in the state to the creation of such positive attitudes should not be ignored in this context. Perhaps for other

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<sup>7/</sup> It has been reported that, though the average rate made for unskilled male labour (including the deferred component) has been only Rs.7 per day (which is not above the prevalent wage rate in the area) much higher wages have been earned by some workers through the piece-rate system. The measurement of the quantum of work done, in the case of the piece-rate system, has been carried out by the Public Works Department. All this, however, needs to be investigated more fully.

<sup>8/</sup> The finding that land was donated by non-beneficiaries is apparently not wholly correct. In the case of the Kadungallur scheme, some of the land needed was already in the hands of the government. In other cases, beneficiaries who owned only small plots of land were compensated at a flat rate and the sums paid out treated as part of the cost of the schemes.

fortuitous reasons, even the district development machinery proved to be more effective than usual and the district collector became, as the late Arthur Cotton had suggested in 1885, in effect a director of public works.

There are, however, a number of less reassuring aspects of the experience to date which should not be overlooked. The serious implications of withdrawals from the fixed deposits of deferred wages have already been mentioned. The next most serious question posed is whether the beneficiaries of the schemes already completed will recoup the Bank for part of the costs incurred, as earlier agreed. So far only one of the beneficiaries has paid the instalment due out of the proceeds of the additional crop raised recently. Though it is too early yet to draw any firm inferences, in part because not even a year has elapsed since the completion of any of the schemes and in part on account of the exceptional conditions created by the partial drought earlier in 1975, this is a matter that clearly needs serious attention from the beginning so that undesirable precedents and attitudes are not allowed to develop. Informal investigations in the area indicate that some of the beneficiaries, especially those with the larger land holdings, nurture the hope that it would be possible to pressure the Bank and the state government to write off the amounts due from them.

One way of dealing with this kind of problem might be to make clear that further financial assistance to the Bank will be conditional on its performance, judged in terms of all the criteria laid down earlier including its ability to recoup from the beneficiaries the costs incurred. Since it has been reported that the workers in the area are also keen on more schemes being taken up by the Bank in order that they can secure more employment, it should be possible (particularly in the relatively

favourable conditions in which Kerala is placed due to extensive literacy and the existence of strong trade unions among agricultural labourers) to resolve issues of this kind through the normal administrative, social and political institutions.

The Evaluation Report of the State Planning Board draws attention also to the dearth of technically sound, economically feasible and adequately processed schemes available for adoption without delay by the Bank even though it is evident such schemes might not be lacking in the district as a whole.<sup>9/</sup> The importance of preparing schemes well in advance, scrutinizing and evaluating them carefully and extending as necessary the territorial coverage of the Bank's effective operations cannot be over-emphasized. There is in fact no reason why all this cannot be done, provided the need for such preparatory work in advance is clearly recognized. Once the schemes are prepared with adequate technical assistance, simple methods of project evaluation (such as can be left even to "bare-foot" evaluators supervised by some kind of sample check) can be fairly easily devised and the appropriate organizations also created for undertaking such evaluation. If, on the other hand, these aspects are ignored, irrational social and political

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<sup>9/</sup> Having completed work on two schemes, and with work on the third nearing completion, the Labour-cum-Development Bank in Ernakulam has already taken up the fish pond scheme which had been earlier held in abeyance. Apparently the Bank has divided the original scheme into two parts and is taking up in the first instance only a part of it at an estimated cost of Rs.0.6 million. Since this scheme, when implemented, will permit the culturing of prawns, some of which could be exported, it has important foreign exchange considerations in its favour, apart from the additional employment opportunities offered in the process of construction. The flow of additional income from the completion of the first part of the scheme-likely to be high relative to the capital cost due to the high value of prawns-is proposed to be used by the Bank itself (the direct beneficiary in this case) for taking up later the second part of the scheme as planned, so that the state government does not have to be approached for additional funds.

pressures and vested interests of various kinds are likely to dominate the decision-making processes of the Bank, and over a period of time reduce its effectiveness as an agency for the promotion of development-oriented employment. Some evidence for this already exists and therefore the need for taking immediate action along the lines indicated above is clear. Social and political pressures cannot be avoided, but they can be channelled into worth-while directions through imaginative building up of institutions and practices.

Annex

GUIDELINES TO FINANCING OF THE SCHEMES UNDER THE  
PROPOSED LABOUR-CUM-DEVELOPMENT BANK

As a pilot project a Labour-cum-Development Bank has been registered in the Ernakulam district as a co-operative society. It proposes to take up in 1975 four lift irrigation schemes and a scheme for the construction of a fish pond in the Alengad and Parur blocks. The names of these schemes and estimates of the capital expenditure involved, as supplied by the district collector, are given below:

<u>Name of scheme</u>	<u>Capital expenditure (rupees)</u>			Total
	Wages	Materials	Land acquisition	
Thonnakuzhikulan lift irrigation	70,000	46,000	22,000	138,000
Adwathuruthu lift irrigation	124,000	110,000	76,000	310,000
Kadungalloor lift irrigation	46,000	7,000	-	53,000
Angadikadavu lift irrigation	149,000	108,000	24,000	281,000
Kottuwally Kayal fish pond	900,000	540,000	-	1,440,000

The schemes have not yet been worked out in sufficient detail to permit an economic evaluation. In the case of the lift irrigation schemes, estimates have been furnished of the likely increase in output of paddy and of the additional "net profit" per acre, including in "the cultivation

expenditure" the cost of all the labour required, whether such labour is hired or supplied by the members of the family farms. A closer scrutiny of these estimates is required though estimates of the addition to output do not appear to be unreasonable. Some further work has also to be done on the hired-labour component of the recurring costs. In the case of the fish pond scheme, the value of the prawns that can be auctioned by the panchayat has been estimated at Rs.250,000, but it is not clear whether there will be any recurring costs to be set against this; nor have the proposed auctioning arrangements been decided upon. In addition to the returns from the sale of prawns, some income is also expected from coconut trees grown on the bunds, but the precise details, the number of nuts expected on average from each tree, the price per nut, the cost of inputs etc., of the estimated income of Rs.20,000 per annum from this source have not been furnished. For these reasons it is not possible to make even rough estimates at this stage of the likely rate of return from each of these schemes.

A question that has been raised meanwhile is how much of the total cost should be recovered from "the beneficiaries" (defined to include only the cultivators whose production would go up as a result of the lift irrigation schemes, and the Kottwally panchayat which would secure additional revenue from the proposed fish pond). It is difficult to answer this question precisely without more information about the costs and returns in respect of each of the schemes. All that can be attempted at this stage therefore is to lay down some general principles that might be followed in fixing the amounts to be recovered by the Bank from the beneficiaries.

A fact brought up by the district collector is that the lift irrigation schemes proposed are no different from those normally undertaken by the government as part of its development programmes in the five year plans and that hitherto the beneficiaries have been required to pay no more than Rs.6 per acre of the area brought under irrigation. The beneficiaries can be persuaded to pay more now only on the reasoning that the Labour-cum-Development Bank could finance the implementation of these schemes immediately and that they would therefore be able to benefit from them much earlier than if they waited for them to be taken up by the government. There is, apparently, evidence that they are persuaded by this argument to pay Rs.100 per acre, or even more, for a specified period and are willing to sign agreements with the Labour cum-Development Bank binding themselves to make such payment. However, it is the district collector's judgement that, in view of the lenient pricing policy followed by the government hitherto in respect of irrigation, any attempt to recover the full capital expenditure on each scheme may not succeed, and that therefore it might be better at this stage to aim at recovering only about 50 to 60 per cent of the total expenditure on each scheme.

Apart from this practical consideration, a case could be made for subsidizing the entire Labour-cum-Development Bank project to the extent that the social returns from the schemes undertaken by it can be demonstrated to be higher than the private returns. Assuming that the social returns can be calculated with the help of the necessary data, the question remains of how the quantum of the subsidy is to be determined and who should receive the benefit of the subsidy given. Though the issues raised are of a complex nature the solutions, when found, will have to be simple enough to be operationally feasible. It should also be possible to explain the rationale of the subsidy system to any person

associated with the Bank, such as a shareholder, a worker employed on the schemes financed by it, a beneficiary, an administrator, or a member of the general public.

If the capital expenditure incurred by the Bank is not to be fully recovered from the beneficiaries (on the grounds that the social returns are higher than the private returns), it is obvious that the state government-which is to provide the necessary finance-will ultimately have to treat as grants part of the finance extended by it to the Bank. In effect this will be a recurring subsidy from the government to the Bank as long as the schemes selected by the latter conform to the conditions which are supposed to be satisfied. The first question to consider therefore is how the state government might fix the quantum of the subsidy to be given by it. The next question would be whether and how the Bank in turn should pass on the subsidy to others.

It will be recalled that the agency of the Labour-cum-Development Bank was proposed for a variety of reasons. One is to involve the local population in the formulation of schemes for providing more employment. Another reason is to ensure that the schemes chosen are as productive as possible, enabling the recoupment of the expenditure of these employment, creating schemes for the purpose of financing still more such schemes in each area. A third is the need to phase the implementation of the schemes in such a way as to provide more employment when no other work is available in the neighbourhood, and avoid the phasing being determined by time-tables based on other considerations, such as spending the sanctioned amount by the end of each financial year. Still another reason is to explore the possibility of inducing those to whom employment is provided, on days when they would have been otherwise idle, to save a fraction of these additional incomes.



Since any bureaucratic control over the Labour-cum-Development Bank by the state government would be contrary to the whole spirit of the proposal it is essential, for the objectives to be realized, that there should be enough incentive for each Bank, and the local population it is intended to serve, to function in such a way as to promote their realization. The subsidies made available by the state government to each Bank could be so devised as to provide the necessary incentives.

One set of desirable proposals offered for consideration is the following. Since at any given time the number of workers that can be offered additional employment will be larger the higher the proportion of additional income they are prepared to save, and since workers would need to be given adequate incentive to save, the state government could give as subsidy to the Bank an amount equal to the deferred component of the wages paid. Thus, if the total wage bill on all schemes financed by the Bank during a year is Rs.150,000 and the workers are agreeable to receiving one third of the wages in the form of three-year fixed deposits, the state government could then give Rs.50,000 as an outright subsidy to the Bank for the year.

Similarly, in order to promote quick and effective recovery from the beneficiaries of expenditures incurred in each scheme, the state government could give as an outright grant each year an amount equal to one half of the payments made by the beneficiaries to the Bank during the year. Thus, the higher the proportion of total expenditure on a scheme recovered from the beneficiaries the larger will also be the grant element in the financial assistance given by the state government to the Bank, and this will help the Bank to expand its outlays at a faster rate.

Many schemes require for their implementation the acquisition of some land. But such acquisition is also very often used for various malpractices, as when the more powerful landowners in an area get their relatively inferior land acquired for "public purposes" at a handsome profit to themselves. To exert social pressures in the other direction, more particularly since it is now customary for farmers benefiting from minor irrigation schemes to donate the land required for these schemes, it might be useful if the state government offers as outright subsidy to the Bank an amount equal to 75 per cent of the value of the land donated during the year for the implementation of its schemes.

For illustrative purposes, consider the implications of the above suggestions for the Angadikadavu lift irrigation scheme, estimated to cost Rs.280,000. Assuming that the workers employed on the scheme will agree to accept one third of their wages in the form of three-year fixed deposits, that 50 per cent of the total capital expenditure on the scheme will be recovered by the Bank in instalments from the beneficiaries, and that the entire land required for the scheme will be given without charge, the Bank will be entitled to grants from the state government amounting to nearly Rs.140,000. If the entire capital expenditure is recovered from the beneficiaries the grant element of the scheme will come to as much as Rs.210,000.

It will be evident from the foregoing that the more fully the Bank, and the local community it serves, satisfy the conditions specified for promoting a climate favourable to the growth of self-sustained employment the smaller will be the loan element of the expenditure on the schemes the Bank sponsors. If the Bank is able to recover, as a grant, a high proportion of its expenditure, it is open to it to decide

what to do with the sum involved. It is already a part of the proposal that workers employed on the schemes should be offered interest at the rate of 12.5 per cent per annum on the deferred component of their wages. In addition, the Bank could use the grants received for taking up schemes in the area which do not offer a high rate of return, such as housing for the poorer sections of the population. Once the subsidies given by the state government are designed to provide incentives in the required direction it should be left to local leadership to decide how best to utilize the agency of the Bank to promote the welfare of the people in each area.

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## TOURISM

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The development of tourism in Kerala has so far been promoted along conventional lines through tourist bungalows (which cater only to a small number), hotels (which are generally too expensive for even middle income groups travelling with family), and information and publicity (of an all too general nature) about the attractions of the State through departmental agencies. The impact it has made by way of generation of additional income and employment has not been very significant.

And yet the potential seems much larger, particularly from among tourists within India. Leave travel concessions given to public sector employees have created a new and very large clientele seeking tourist facilities at moderate prices, as also the development of tourist agencies in neighbouring States which organize group tours with transport provided by them. The facilities provided for them have to be mainly for families and larger groups travelling together and looking for accommodation (above all) at relatively low prices. (A fairly high proportion of tourists from outside India also seek similar low-cost accommodation, contrary to the assumptions on which five star hotels are being set up for them at exorbitant cost).

In other countries, such as Switzerland, Spain and Yugoslavia, this kind of demand has been met to a large extent by private homes being

encouraged to offer the necessary facilities; such homes being registered with local authorities which take the responsibility of grading them according to the facilities offered and fixing the appropriate tariffs; and tourist promotion agencies making available all the necessary information in detail, through brochures for each town or area, to tourists who wish to make arrangements in advance. Credit on reasonable terms is made available in Yugoslavia for the setting up of the additional facilities needed (such as telephones and transport) in individual homes or by groups of them.

The scope for efforts along similar lines in Kerala is very considerable. Private homes with excess capacity exist in large numbers in most towns and cities, as also in the rural areas, and therefore the additional investment needed on this account would be limited. The additional expenditure required would be mainly in setting up suitable transport facilities for making possible convenient travel by road and canal at moderate prices; at present the high fares charged by taxis (which can be brought down if they are assured higher turnover), and the problems involved in securing accommodation in the available bus transport, are now a major discouragement to tourist travel within the State.

There is vast scope here for not only imaginative organisational arrangements but for cooperative effort for various related purposes, as well as for providing remunerative and useful employment to a significant number of the 'educated unemployed' in the State. It has also the potential for many cultural dimensions being introduced, such as through encouragement given to societies for organising the available musical, dancing and other talents to provide performances in towns and villages on a more systematic basis for tourists as well as for others.

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