

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

I. INTRODUCTION

II. PAST APPROACHES TO THE PROBLEMS OF BACKWARDNESS

1. The problem of regional balance and of backwardness has attracted the attention of planners. The problem has sometimes been seen in terms of inter-state disparities though there is also a recognition that there are many disparities within each state also. The emphasis has been on backwardness in terms of economic performance though the impact of historical and social factors on economic matters has been recognised. A clear concept of backwardness seems to be missing and the term is used in a more or less in vague sense to designate areas that do not seem to be benefiting adequately from general development measures. The more concrete steps taken involve mainly special schemes like the subsidies for industry of the social area development programmes. Many of these special schemes are more palliatives that fail to tackle the root of the problems of backwardness. What seems to be missing is the recognition that most backward areas have a potential for growth which can be tapped if certain special initiatives are taken. The important task of planning for backward areas is to identify what these special initiatives are in each type of backward areas.

(Para 2.19)

III. EVALUATION OF RURAL DEVELOPMENT PROGRAMMES

2. Various physical surveys were supposed to have been carried out as a prelude to the schemes but have, in general, not been carried out.

(Para 3.11 & 3.16)

3. Although block level lists of small farmers, marginal farmers and agricultural labourers, have not usually been kept, the studies did not find major leakages in terms of subsidies and credits going to ineligible families. The range of leakages in terms of proportion of misclassified beneficiaries was usually less than 20 per cent.

(Para 3.17)

4. Leakages can be reduced if the required lists of SF, MF and AL kept updated at the block level.

(Para 3.17)

5. Initial expenses amounted to 50 to 75 per cent of the subsidy component of loan-subsidy depending on the beneficiary's status as SF, MF

or AL. It was found that since preliminary expenses were always substantial many beneficiaries had to resort to high interest personal loans to cover these expenses. Non-pecuniary costs of the certification process included the resultant delays as well as loan rejections arising from minor errors that are prone to be found in certificates. The prescription of such certification is also an obvious invitation to corruption.

(Para 3.20)

6. It is difficult to avoid documentation entirely but the maintenance of up-dated lists would also minimise the necessity for different kinds of certificates. A reduction in the number of documents required would also reduce the volume of travel and other expenses.

(Para 3.20)

7. The vast majority of beneficiaries in the livestock linked schemes were found in villages with better transportation linkages.

(Para 3.21)

8. Many of the programmes have not been as successful as expected because of the lack of integrated planning of related facilities and coordination between the different agencies involved. The evaluation studies seem to indicate that existing arrangements for coordination and integrated planning at the local level are not very effective. Improvements in arrangements for local planning and coordination are essential if the special programmes are to succeed.

(Para 3.77)

9. One important aspect of coordination is the link between beneficiary oriented schemes, and area development measures. The evaluations bring out the importance of the infrastructure in ensuring that beneficiaries can take full advantage of the schemes directed at them. Deficiencies in infrastructure arises not merely from the lack of financial resources but also from shortage of personnel. Hence there is a vital need to link up beneficiary oriented schemes with area development measures and the provision of infrastructure.

(Para 3.78)

10. There have been many deficiencies in the support systems. The correct technical advice has often not been given. Critical elements like marketing support have been missing in some cases. Arrangements for technology transfer like farmers training have not been very effective.

(Para 3.79)

11. Systematic efforts to spread the impact of programmes on the interior are necessary if the special programmes are to achieve their purpose.

(Para 3.80)

12. There is a general tendency in plan programmes to concentrate on new investments and not pay sufficient attention to the maintenance of past investments. This feature has been brought out by the evaluations of the special programmes also. It would be useful if the repair of deteriorated facilities and the maintenance of existing assets become an integral part of the planning process. It may be possible to use the Food for Work Programme for this purpose.

(Para 3.81)

13. The procedures which the beneficiary have to follow to obtain assistance are very complex and need some simplification. The assumed economics of the schemes meant for beneficiaries participated also needs to be cross-checked and reviewed from time to time.

(Para 3.82)

IV. CONCEPT OF BACKWARDNESS

14. There are no absolute standards of "backwardness" as there are not such standards for 'development'. Hence the concept is relative one and in the ranking of areas, as perceived by people, all but the ones at the top are seen to be 'relatively backward'. The root of the problem lies in the lack of clarity on the concept of backwardness and its relevance for the processes of planned development. In multi-tier democracy it is also necessary that there should be some degree of consensus behind the specific definitions used to make the concept operational.

(Para 4.3 & 4.5)

15. Backward areas must have a potential for development and there must be some reasons for supposing that by detailed planning, administrative and financial support the productivity of the areas can be raised. This presumes that the area has potential for growth which at present has not been dealt with satisfactorily. Where there is no potential for growth, the answer, as already indicated in past plans, lies in out-migration. Thus for purposes of planning, the areas identified as backward must have three key characteristics:

- (a) They must have potential for development;
- (b) There must be some inhibiting factor which prevents this potential from being realised; and
- (c) There must be a need for special programme to remove or mitigate the inhibiting factor and realise the full potential for development.

(Para 4.7)

16. The concept of backwardness that the National Committee considers relevant for planned development is that an area is backward if it is in need of special measures, in order to utilise its development potential to the full. In this context, special measures are not merely a question of finance but will involve directional departures or changes in the complex of policies, programmes, technologies, and institutional arrangements in the various sectors of development.

(Para 4.7)

17. The index based approach requires specification of the following:

- (i) A set of basic indicators;
- (ii) A procedure for weighting or aggregating so that these indicators can be reduced to a single measure; and
- (iii) A cut-off point below which areas are to be considered backward.

The principal problem with the index based approach is that there is a great deal of arbitrariness at each one of the three stages. This arbitrariness leaves much scope for disputation.

(Para 4.12 & 4.14)

18. From the point of view of the Committee there is a difficulty in the type of indicators chosen. Generally these indicators reflect the results of a development process rather than the casual factors which led to the present situation. The Committee has suggested a concept of backwardness which requires the identification of areas in need of special measures to alleviate the constraints on development. It is not all clear that the types of socio-economic variables used in the index-based exercises reflect this orientation. The aggregation of a variety of indicators into a single measure poses many difficulties. Since the choice of indicators does not necessarily reflect a prior analysis of relevant factors, there is as yet not acceptable method of aggregation.

(Para 4.16 & 4.17)

19. The index-based approach does not classify districts into problem categories and in fact further analysis is required in order to do this. There is also no indication that those below the cut-off are all developable and have the requisite potential.

(Para 4.20)

20. Poverty and unemployment may be manifestations of backwardness but are certainly not causative factors. There are areas which have to be treated as backward even though they do not show a high poverty percentage or rate of unemployment.

(Para 4.22)

(ii)

21. With regard to estimates of domestic product at district/block level, some rudimentary calculations are possible. However, the usefulness of such income estimates is open to question. The income generated in an area is not the same as the income accruing. At a block or district level the difference between these two concepts can be quite substantial.

(Para 4.23)

22. It has been suggested that instead of using an overall index it may be easier to define sectoral indices to identify backwardness with respect to specific sectors of development e.g. agricultural backwardness, industrial backwardness, educational backwardness, etc. The Committee feels that such sectoral indicators would also have to face the problem of identifying relevant indicators, aggregating them and defining cut-off points unless there happens to be the same single indicator and a well-defined norm on which there is a fair measure of agreement.

(Para 4.24)

23. The Committee feels that the present position with regard to data availability and the development of methodologies is such that an index-based approach to the identification of backward area cannot be recommended. Such an approach will not be able to take into account all the relevant factors in an objective manner and the subjective judgements regarding the choice of indicators, weighting patterns and cut-off points will be open to extensive disputation.

(Para 4.25)

24. The term 'problem areas' has to be understood in the context of the concept of backwardness indicated by the Committee. The specificity of technological possibilities, variations in the sectoral mix of economic activity, differences in infrastructure requirements and difficulties in the participation of local people in the economic activities, will to some extent, be found in almost any area. However, there are certain areas where these problems are of an order that requires special measures. In this sense backwardness as defined in the problem area approach is also a matter of degree. The usefulness of the problem area approach lies in the fact that it avoids aggregating very different types of areas into one generalised category labelled 'backward'. The problem area approach is constructive in the sense that the process of defining and identifying backward areas itself suggests the nature of the remedies that have to be applied.

(Para 4.27 to 4.30)

25. The National Committee would recommend that the following types of problem areas be treated as backward for purpose of planning.

(i) Chronically drought prone areas.

(ii) Desert areas.

(iii) Tribal areas.

(iv) Hill areas.

(v) Chronically flood affected areas.

(vi) Coastal areas affected by salinity.

These six categories can be viewed as six types of fundamental backwardness. In this sense an area may suffer from the handicap of more than one type of fundamental backwardness.

(Para 4.35)

26. The six types of fundamental backwardness identified will help to identify the areas where suitable area specific development strategies can give results. However, there is one constraint which can make this difficult. This arises from the prevalence of feudal elements in production relations. The main characteristics of feudalism is that the fruits of labour go to the people at the top and as a result, the vast mass of people at the bottom have no incentive to change. Hence directional change and area specific strategies will have no effect unless the overall fundamental defect of feudal social structure is corrected.

(Para 4.37)

27. There are many areas where the potential for development is not realised because administrative systems are poorly developed and indifferently staffed. The Committee recognises the gravity of this problem but for backwardness as a further type of backwardness.

(Para 4.38)

28. The Committee has also considered the problem of industrial dispersal and in that context identified certain areas as being in need of special measures to promote industrialisation. It is a matter of history and cannot be lined up straightaway with an index of local potential of human endeavour. It is in a class by itself and remedies have to be sought, not in area development schemes, but in the creation of a commercial and industrial environment in a dispersed network of growth centres.

(Para 4.40)

V. CRITERIA AND STRATEGY FOR BACKWARD AREA DEVELOPMENT

29. The Committee has dealt with the development problems of these areas and suggested remedies in separate reports. These recommendations should form the basis for action in these areas.

(Para 5.2)

(iv)

30. There are some areas which can fall into more than one category of backwardness. For example, there is an extensive overlap between tribal and hill areas particularly in the north-east. There is also some overlap between tribal and drought prone areas e.g. in south-east Rajasthan. In these cases the appropriate strategy has to be to combine the remedies suggested for both types of areas.

(Para 5.3)

VI. INDUSTRIAL DEVELOPMENT OF BACKWARD AREAS

31. The salient features of the specific recommendations of the Committee for operationalising the strategy for industrial dispersal are listed below :—

- (i) The cut-off criterion for the selection of centres for the development of medium and large industry would be that they should have a population of at least 50,000 and that they should be situated at a minimum distance from an existing industrial centres. For this purpose "existing industrial centres" should be all towns/urban agglomerations with an employment in non-household manufacturing of over 10,000. The minimum distance should be 150 km. for centres with an employment of over 150 thousand, 100 kms. for centres with an employment of 50—150 thousand, 75 km. for centres with an employment of 25—50 thousand and 50 km. for centres with an employment of 10—25 thousand.
- (ii) 100 such centres should be selected out of all eligible towns for development in the Sixth Plan.
- (iii) Each growth centre should be managed by an Industrial Development Authority which would have the charter to development and provide the necessary infrastructural support as well as to mobilise funds from institutions like IDBI, HUDCO, etc.
- (iv) For institutions like IDBI, HUDCO, etc. to play an effective role, it would be desirable that appropriate financial support to these institutions is assured during the plan period.
- (v) State Governments should undertake to provide the requisite infrastructural facilities at these selected locations and to orient their own promotional efforts in the same direction. Urban Development programmes may be used in these centres on a priority basis.

- (vi) The schemes of Central capital subsidy concerning finance and income-tax concessions may continue for the Sixth Plan period for all small industries located outside the cut-off areas specified under recommendation (i) whether located in a growth centre or not. The infrastructural support the Committee will be recommending for each growth centre will not be available for industries which may come outside such growth centres.

(Para 6.6)

32. The Committee accepts that the spill over effects of a centre outside state may be somewhat lower than in the State itself and some modifications of the distances may be acceptable. A shorter distance accepted by general consensus among the states for such a situation, may be used for determining ineligible areas in a state because of the effects of existing centres outside the states.

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(Para 6.8)

33. The cut-off distances recommended by the Committee reflect a judgement which the Committee considers valid. The main argument advanced by states is for a shorter distance. The Committee is prepared to accept a shorter distance criteria provided the distance is not made so short that our objective of industrial dispersal in all the backward areas of the country is thereby not reached within a foreseeable future.

(Para 6.9)

34. The Committee has defined existing centres on the basis of the level of employment in non-household manufacturing as per the 1971 census. It has been argued that non-household manufacturing includes large number of workers and in small scale manufacturing units whose spread effects are likely to be much less than that of large factories. Hence it has been suggested that the cut-off distances applicable to centres where the major part of employment is in tiny units should be somewhat lower. The Committee feels that there is some validity in this argument.

(Para 6.10)

35. The transport subsidy scheme in its present state does not seem to be very effective as is clear from the very low level of disbursements. Hence the National Committee is of the view that an alternative approach is required to meet the problem of high transport costs and uncertain availability of raw materials in remote areas.

(Para 6.25)

36. The Committee would suggest that transport subsidy scheme should be linked up with the improved arrangements for raw material supply.

(v)

The Committee has recommended that establishment of a state level supply and marketing corporation for supporting small and village industries. In the view of the Committee, these corporations should be responsible for much of the raw material supply from outside the regions.

(Para 6.27)

37. The Committee would recommend that, for the controlled or canalised raw material, the transport subsidy should be calculated on the basis of the lowest cost of transportation from the actual supply point to the concerned depot of the support organisation.

(Para 6.27)

38. The transport subsidy on raw materials on items other than canalised and controlled materials as also the supplies obtained directly by industrial enterprises in the eligible areas should be paid on the following basis :

- (i) The source of supply may be deemed to be Delhi for eligible areas in J&K and Himachal Pradesh, Lucknow for eligible areas in U.P. and Calcutta for eligible areas in the north-east, Sikkim and West Bengal or the actual supply point if it is nearer.
- (ii) For a certain distance from the deemed or actual source of supply no subsidy should be payable. This cut-off distance will have to vary for the different eligible areas and may be determined after closer study by the Ministry of Industrial Development. This same subsidy may also determine the proportion of transport costs for movements beyond the cut-off distance which would be subsidised.
- (iii) Through road movement should be supported and the norms for permissible road haulage and costs may be determined by the Ministry of Industrial Development.

(Para 6.28)

39. With regard to the regions to be covered the Committee would recommend the inclusion of the Darjeeling district of West Bengal to the present list.

(Para 6.29)

40. The Committee would not recommend any change in the class of eligible units or the quantum of the subsidy. However, the subsidy should also cover coal and petroleum products but in this case it should be calculated on the basis of the costs of transportation beyond the specified rail head only.

(Para 6.29)

41. In the case of Andaman and Nicobar Islands and Lakshadweep, port charges should be included in the calculation of transport costs.

(Para 6.29)

42. Apart from the transport subsidy, the Committee would recommend that more stock yards and depots should be established in the remote regions in which the transport subsidy is applicable for the supply of raw-materials by public sector organisations like the SAIL, STC, NSIC, etc.

(Para 6.30)

43. Till such time as more stock yards are established the costs of transportation upto district headquarters should be absorbed in the national system.

(Para 6.30)

44. An assessment of the raw material requirements in the backward regions should be prepared by the Ministry of Industries who should then pursue the matter with the concerned Central Organisations for ensuring the necessary supplies.

(Para 6.30)

45. The Committee would suggest that in any pricing system for commodities produced or marketed through the public sector, a degree of freight subsidisation on supplies to remote areas would be worthwhile.

(Para 6.31)

46. A subsidy on the transport costs of sending products out of the region may be of some relevance mainly for some small and village industries. In these cases the transport subsidy on the movement of output may be paid to the official organisations which offer marketing support to small and village industries. The principles underlying such a subsidy may be as follows:

- (i) The destination of output may be deemed to be Delhi for eligible areas in J&K and Himachal Pradesh, Lucknow and for eligible areas in U.P. and Calcutta for eligible areas in the north-east, Sikkim and West Bengal or the actual destination whichever is the nearer.
- (ii) For a certain distance upto the deemed or actual destination no subsidy should be payable. This cut-off distance would have to vary for different eligible areas and may be determined after clear study by the Ministry of Industrial

(vi)

also determine the proportion of transport costs for movements beyond the cut-off distance which would be subsidised.

- (iii) Through road movement should be supported and the norms for permission road haulage and costs may be determined by the Ministry of Industrial Development.

(Para 6.32)

47. Irrespective of a transport subsidy, improving the transport infrastructure in the remote regions is a necessary prerequisite for industrialisation. The development of new roads, bridges or other transport facilities that shorten the distance to the national road and rail network may have a more significant impact on the costs of transport for a wide range of industries.

(Para 6.33)

48. A scheme to subsidise trucking operations in remote regions may be considered. This could take the form of loans on concessional terms for the purchase of trucks, provided these trucks are based in these areas. The growth of locally based truck fleets would improve the availability of transport facilities, which may be of greater consequence particularly for small industries or low-weight/high volume industries.

(Para 6.34)

49. The Committee would recommend that the freight rates from the remote regions as presently identified for the transport subsidy scheme, to the nearest metropolitan areas should be set at a concessional level.

(Para 6.35)

50. The National Committee recognises that the State Governments will wish to promote industrial development in all areas within their territorial boundaries. The Committee would however suggest that the State Governments cannot plead for central schemes for industrialisation of backward areas if their own actions work against the orientation of these central schemes. Once a certain consensus on the concept and definition of industrially backward areas is reached, then the Central and State Governments must work together to promote industrial development in the identified areas. Hence the State Government schemes must also reflect the same geographical orientation as the Central schemes. They must build in a preference in their own schemes of concession for the areas identified as industrially backward for the central schemes.

(Para 6.42)

VII. STATISTICAL BASE FOR LOCAL PLANNING

51. These exercises in local planning for backward area development cannot be undertaken in any effective manner if the data base for such planning is not built up.

(Para 7.1)

52. With regard to crop statistics the coverage of horticultural crops and minor crops, which may be important in some areas needs to be improved. The classification of non-cropped areas needs further refinement and elaboration and categories like "barren and uncultivable lands" have to be defined more precisely, since new developments in technology may well make many of these areas usable for production purposes. These refinements and elaboration in the classification of non-cropped area may be particularly important in backward areas.

(Para 7.5)

53. From the point of view of local planning the principle^{pal} deficiency in the system for estimating yields lies in the fact that the estimates as presently made may not be valid at the block level. It will, therefore, be necessary to supplement present arrangements by a special coverage at block level of important crops in that block.

(Para 7.6)

54. The sample surveys for yields estimates presently exclude many agricultural activities like horticulture, animal husbandry, fisheries etc. Hence measures to obtain estimates of yields will be required for these activities at block level.

(Para 7.7)

55. There is a quinquennial census which provides comprehensive data on livestock, agricultural machinery, implements etc. These data can and should be processed at the block level to provide a base for animal husbandry statistics. At present these data are collected on a household basis but are not being tabulated in a manner which shows distribution of livestock assets by household categories. This is an important element in local planning and should be covered in the tabulation programmes.

(Para 7.10)

56. There is an elaborate scheme of farm surveys which collects detailed data on cost structure, input use etc. At the block level, a supplemental effort at analysing the technoeconomics of major agricultural activities in the block will have to be made by the district statistical system.

(Para 7.11)

(VII)

57. Unit level information must be stored in a readily retrievable form so that the schedules are easily reprocessed to obtain information in a different format if required. The primary data must be stored in two sets of cards/discs/tape decks. One of these should be accessible to all Central and State Governments Departments and organisations, research workers and academicians so that they can reprocess primary data in the manner required for their analysis. The Committee understands that this has been accepted for NSS data. The principle should be extended to all data sources.

(Para 7.13)

58. In the industrial sector comprehensive data is not available even for the number of units let alone for magnitudes like production, input use and employment. Moreover, the system of enquiry lacks coherence in that there is an overlap between some systems and a total exclusion of certain sectors.

(Para 7.14)

59. The data from the Factory Act Records and Economic Censuses of 1977 and 1980 can be tabulated block-wise. This should be done and the lists and estimates emerging from this should be compared with the lists maintained by the IDC and by local offices of bodies like the Handloom Directorate, Coir board etc., so as to construct a complete sample frame.

(Para 7.15)

60. The Committee would recommend that the DIC and the project group for village industries should carry out regular surveys of units in their area to collect data on raw material requirements, marketing problems, labour requirements, etc. The surveys can concentrate on the major sectors in the block and district. This can be organised on a census basis if the number of units is not very large and on a sample basis otherwise.

(Para 7.16)

61. Local agencies like the DIC and the project group for village industries must undertake techno-economic studies of this nature for a few sectors of importance within this area. Management institutes and other academic bodies must be used in a systematic way for this purpose.

(Para 7.17)

62. The data system for the services sector is particularly weak except where the service activity is in the public sector. These enterprises will also be covered in the Economic Census and it would be desirable to institute some system of sample surveys and techno-economic studies for these sectors as has been suggested for small and village industries.

(Para 7.18)

63. It would be desirable to ensure that as and when the household card system in a project area is complete, the relevant data are transmitted to the agencies responsible for the census/sample enquires.

(Para 7.19)

64. The data system suggested above rests on four censuses : the Population Census, the Agricultural Census, the Livestock Census and the Economic Census. These provide the bedrock on which the rest of the system is constructed. It is essential that the concepts and definitions used in these censuses are consistent and stable from census to census.

(Para 7.20)

65. It is necessary that the tabulation plans for all census based enquiries be modified to provide block level tables.

(Para 7.21)

66. The State level organisations like the Statistical bureau have their own statistical staff. At present much of the time of this State Statistical staff is used to undertake survey on a matching sample basis with the NSS. In a sense they are duplicating the work done by the NSS. by now the size of the central sample in the NSS is large enough to provide valid estimates at State or sub-region level and there is no real need for a matching State sample. The State Governments resources are better utilised to fill in the gaps in the data system for local planning.

(Para 7.22)

67. The staff required for field work is available. However, all of this staff is not under unified control. What is required for the effective use of this staff is co-ordination. This can and should be done by the District Statistical Officer who is in position, at present, in most districts.

(Para 7.23)

68. The work to be done has to be assigned to the different field workers on the basis of an agreed work plan. The basis for this must be a plan which specifies the items of data to be collected and the proposed coverage of enterprises or households in the block and the district. This must be done by the district planning authority, the project authority, the DIC and other planning agencies in consultation with the District Statistical Officer.

(Para 7.23)

69. The decentralisation of processing capabilities is very important if data is to be made available in good time. Moreover, the ready availability of processing facilities at local level will

encourage a more constructive use of statistical data in local planning. Hence there should be a data processing set-up attached to the D.S.O.

(Para 7.25)

70. The planning agencies at block/project/district level will have to obtain data from the various agencies involved and put them together in the form of a statistical abstract. This abstract should cover not just the general economic data but also the statistics generated as part of the administrative process. In many states this is being done at the district level. The National Committee would recommend the same should be done at block and project level.

(Para 7.26)

VIII. FOCAL POINT—AN AREA-CUM-BENEFICIARY ORIENTED APPROACH

71. A closer link is required between infrastructure development and programmes which are feasible in the area and further between these programmes and the capacity of the families to absorb the technology. It is this tie up between the family-wise approach and the area approach that has to be established at the focal points.

(Para 8.13)

72. Such an approach, has to be as close to the beneficiaries as possible. The appropriate level has to be a cluster of villages, with a population of 15,000—20,000, where plans would be implemented and family-wise contacts built up. It is in this context that the Committee is recommending a focal point approach to take care of both the beneficiary and the area-oriented needs.

(Para 8.14)

73. The selection of the village as a focal point will have to be done very carefully. Broadly speaking, the committee would suggest that the village so selected should be reasonably big village, it should be centrally-located geographically and its activities should cover as far as possible, within a radius of 5 kms.

(Para 8.16)

74. The Committee considers that each focal point should have certain rural infrastructure facilities, depending on the potential identified, both for agricultural and non-agricultural activities. The focal point should also provide the necessary economic and social services to the rural community.

(Para 8.17)

75. Integrated rural development programme should be implemented through the establishment and development of focal points (growth centres)

in a planned manner so that the village is, as far as possible, more than 10 km. from such a focal point. In this manner, the planning process will be brought nearer to the field and the schemes will be more relevant to the problems and potentialities of the selected areas and its people. In such cluster, one village should be developed as a focal point.

(Para 8.17)

76. It would be the duty of the Project Authority to ensure that the rural development programmes of the cluster are not implemented as a separate programme with its own chain of command but are linked and coordinated with other Block level programmes as necessary.

(Para 8.19)

77. The Committee would, emphasise that it is essential that whatever be the programme, necessary support must be available to the focal point from the Block level. If this requires some strengthening of particular discipline, this will have to be under-taken.

(Para 8.20)

78. A comprehensive resource survey is generally regarded as the first stage of assessing the potential for development. The resources survey should aim at and be limited to such of the resources which can be developed with the technology at present available, the manpower in the area and the skill available and the state of the infrastructure and the administrative competence that is also available to translate potential into increasing the gross product. Identification of the resources that are to be studied in some depth for preparation of the plan for the Block is, therefore, to be the first exercise. The Committee recommends that this process should be carried out by the peripatetic team having a detailed dialogue first with the project level advisory group, helped by the administration at the project and the block level helped by higher level technical experts.

(Para 8.21)

79. The initial exercise will have to be based on development of the area by the people. Exogenous development by entrepreneurship and skills from outside the area should be reserved for a later part of the planning process. The planning group will then organise survey of these resources only in the first run, on the basis of such statistical information as is readily available. Too much time should not be taken in getting into details of village-wise statistics at this stage.

(Para 8.22)

80. The experience of the actual working of the schemes in many parts of the country shows that the essential requirement of dovetailing a viable area programme with the family-wise approach has not received sufficient attention so far, may be because a workable methodology has not yet developed. The Committee is of the view that unless a methodology is prescribed which is understood by the field level organisations of the various development administrations and their respective roles clearly defined in the process, this tie up cannot take place.

(Para 8.25)

81. The initial enumeration of the families, their occupation and income for the bench mark survey will be relevant to all types of methodology for their development. This exercise will take time. Hence programmes should be phased over a period of five years. Any attempt to rush this time phase will be counter productive at the end.

(Para 8.26)

82. Having decided on a quinquennial time frame for the family-wise approach, a haphazard identification of one-fifth of the families in a block each year will also not be desirable. The Committee would recommend that five foci, suitably placed in important villages in the block, and sufficiently dispersed over the area of the block, may be selected for starting the family-wise assessment. For each of these regions, the family-wise study and link up of the programme will have to be phased over a five year period.

(Para 8.27)

83. Before, members of the family can be asked the question as to what development programmes they will adopt, there has to be sufficient dialogue between the planners and the people to explain what sort of programmes are available.

(Para 8.28)

84. The planning group having identified the type of development programmes which are suitable to the area, it is necessary to examine whether there are already nuclei of various programmes in the block. Where there are no nuclei of such programmes, pilot programmes will have to be established as demonstration centres in the block.

(Para 8.29)

85. Simultaneously with the preparation of the block programme and enumeration of the families and their capacity, a parallel demonstration programme of the various developmental approaches available and considered suitable in the area should be started.

(Para 8.29)

86. The planning process will be a continuous one, refining the family-wise approach as programmes are demonstrated and families adopt them. One should not wait for perfection before starting the link up between family-wise approach and the area programmes, in each block in each of the mandals there must be some programme or the other considered suitable for the area which are already in operation and showing results.

(Para 8.30)

87. There are certain programmes already in the plan which develop certain infrastructure in the area which can be availed of for development of various classes of families in the area.

(Para 8.32)

88. The general development programmes in the area will have a definite role in giving greater income opportunities to all classes of the population. In the family-wise approach, the planning group should take this into consideration and see how much of the families which were not given a link up with a development programme during the year can be benefitted by the area programme. It will then be their duty to enumerate such families who will benefit and see that the extension organisation attends to them and that they get the required benefit.

(Para 8.32)

89. The path that the Committee has recommended tries to adjust the programme at each stage with the facilities that are available at that point of time.

The sequence of action is as follows :—

- (a) development programmes which are already understood in the areas and are suitably demonstrated, should be linked up with the family approach ;
- (b) general schemes of development which automatically lead to the development of families within the ambit of the schemes are to be identified and the beneficiaries listed and their requirements ensured ;
- (c) simultaneously, tightening of the effectiveness of the input supplies including credit and the health and pest control measures so as to give necessary coverage to every family in the rural areas covered by the programme ; and
- (d) demonstrating new programmes in the Block first and then enumerating families for coverage in different clusters.

(Para 8.33)

(x)

90. By merely training the available block staff in the statistical exercise, it should be possible without any large expenditure to complete the family wise survey and fill up the forms in a matter of two months. If the planning authorities choose the lean season, it is easy to depute the various developmental staff, particularly the village level workers and agriculture staff for completing this exercise. Any additional expenditure on stationery, transport etc. should be a part of the plan expenditure.

(Para 8.34)

91. All our area programmes were started with the objective of developing the production potential of the area on the basis of the introduction of new technology and provision of suitable institutional, infrastructural etc. facilities. The planning group will have to provide for the development of all the families in the area considered suitable for a programme or programmes. The Committee emphasised that what they are seeking is development of the area as a whole by utilising the resources of the area and not merely a selective development of the poorer sections only.

(Para 8.34)

92. Today, the agricultural labour and rural labour suffer from having to sell their wages in a buyers market. The general growth that can be initiated and should be initiated will create the sellers market for labour which only will give a bargaining position to the agricultural labour and hence higher wages.

(Para 8.34)

93. Some additional support would be necessary for surveys, both area and family-wise, planning, provision of infrastructure etc. Ordinarily it should be a part of the budget of the Block and there should be no difficulty in taking care of this expenditure from the various special grants which are being made available to the Block. In any case, the Committee has earlier recommended in its report on "Organisation of Administrative and Financial Structures for Backward Area Development" that Rs. 5 lakhs per annum should be given to each of the Blocks in the backward areas, as per a phased programme. The Committee feels that with this money as well as the money available under IRD and other programmes, it should be possible for the Project Authority to build up 5 focal point centres in each Block.

(Para 8.35)

IX. GROWTH CENTRE AS THE CATALYST OF AREA DEVELOPMENT

94. The Committee has suggested measures for increasing productivity and utilising fully the development potential for backward areas and

also for achieving a reasonable distribution of benefits towards the goal of social justice. This frame leaves out a sector of opportunities for the semi-skilled and highly skilled population and educated youth in the areas of fundamental backwardness which is available in the general growth of the nation in various fields of development.

(Para 9.1)

95. In most of the large projects located in backward areas neither the direct involvement in the construction of these projects nor the secondary and tertiary growth opportunities could be availed of to any large extent by the people of the backward areas round about. Further, there has been no complementary growth in other sectors of the economy as we normally expect. The Committee has noted with much concern this gap between the possible opportunities and the availing of the opportunities by the surrounding population. The Committee has tried to see if bridging of this gap is possible. The broad conclusion is that this is possible provided very substantial support, planning and implementation of various infra-structure and aid programmes are carried out by the State administration.

(Para 9.3)

96. Broadly speaking, we can foresee five major types of development which would create growth centres with the substantial potential for generating all round development in the backward areas surrounding the projects and amongst the people of the area. These are :

- (i) Industrial complexes
- (ii) Growing Urban complex
- (iii) Raw material exploitation (forest and minerals and industries based thereon).
- (iv) Large Irrigation Projects ; and
- (v) Hydel and Thermal Projects.

The type of secondary and tertiary potential generated and the measures required to ensure that this potential is used for the development of the backward area will vary from case to case.

(Para 9.4 & 9.5)

97. The construction phase of the project has many opportunities for suitable entrepreneurs to avail of the employment and earning opportunities. The construction itself generates secondary and tertiary growth in the infrastructure creation and the service supports required. A continuous monitoring of demand will have to be made and steps taken to train the local people to avail of the opportunities.

(Para 9.6, 9.7 & 9.8)

98. Besides, the project plan, a large secondary plan for training of manpower and its absorption has to be made. The responsibility for doing this must rest with the district planning centre working in association with the project.

(Para 9.8)

99. Large scale ancillary industrial development providing materials required for the construction of the project and for the housing can well be developed in these backward areas following the guidelines that have been given in the report of the Committee on "Industrial Dispersal". These industries will have to be nurtured from the start in ensuring the ancillarisation of the demand of the project.

(Para 9.9)

100. The new road structure leads to opportunities for developing sub-growth centres which themselves will then generate secondary and tertiary employment in the surrounding areas. Such sub-growth centres where a large number of people will be gathered will require various amenities and services. Proper town planning in the beginning itself for the sub-growth centres will save a lot of trouble later on. Thus town planning and town development will have to be linked up to the growth centre approach.

(Para 9.10)

101. Supply and services for the large population that will congregate at the project and at the sub-growth centres will require consumer goods and various services. Unless there is sufficient planning of the production of the necessary consumer goods as far as possible in the surrounding areas and for training people for taking up the service occupations that are available, the general experience has been that opportunities are grabbed by generally more forward people from other areas of the State or outside.

(Para 9.11)

102. Transport services give a lot of opportunities for self-employment of educated unemployed youth. These opportunities are of a fairly remunerative kind.

(Para 9.12)

103. Entrepreneur identification, their training, credit and technical advice that may be needed have all to be laid down by the state.

(Para 9.12)

104. The development of the area to be irrigated by the project itself calls for tremendous amount of detailed planning of opportunities and how to avail of them. Mere detailed work in localising programmes and projects in agriculture and connected subsidiary occupations will itself absorb a large number of planning

and executing personnel. Agricultural development in the vast areas that would be irrigated will need marketing facilities, credit and transport for moving the surplus production to outside markets. Unless this is planned in advance and the facilities are provided, agricultural development and development of other subsidiary occupations will not progress satisfactorily.

(Para 9.13 & 9.14)

105. In the report on 'Industrial Dispersal', the Committee has already given an idea of the developmental opportunities arising from the construction and running of the industrial complexes.

- (a) Opportunities for direct employment in the construction and operational phase of the industries that will be located in the industrial complex.
- (b) A rapidly growing town attracts a large number of people in direct employment in the industries located there and the secondary and tertiary growth. This will generate large demand for consumer goods supplies and various domestic services.
- (c) The educational requirements of an industrial growth centre would be much more than in a hydel or irrigation project. Similarly, medical facilities will be of a higher order. Unless the necessary infrastructure for both of the right quality is built up the growth centre will not develop and hence further development will not take place.
- (d) Transport and communication services will be tremendously important in an industrial growth centre.

(Para 9.17)

106. The general experience is that wherever projects are developed in backward areas, normally local people do not get a look in either for employment or for marketing their goods at reasonable prices. The linkages between such projects and opportunities for local people to avail of them will need a planning and implementation organisation.

(Para 9.19)

107. The funds provided in the project for rehabilitation can be used in constructive way to promote area development and to strengthen the linkages between the project and the surrounding area. The present approach which sees rehabilitation largely as a matter of compensation should give way to a more positive approach which combines rehabilitation of the displaced families with area development.

(Para 9.20)

X. CREDIT

108. The National Committee endorses the recommendations of the CRAFTICARD in regard to credit arrangements for integrated agricultural and rural development programmes and would strongly urge that the improvements and the streamlining recommended by the CRAFTICARD, once accepted by Government, should be implemented speedily, and, on priority basis, in the backward areas.

(Para 10.3)

109. There are certain special features of the backward areas like the tribal areas, development of village and cottage industries, small scale industries sector, for which the National Committee had made certain recommendations/ in its reports on these subjects. The recommendation suggestions made by the National Committee are supplementary to the general recommendations made by the CRAFTICARD. These recommendations and the CRAFTICARD recommendations have to be knit together to evolve an appropriate credit structure in the backward areas of the country for agriculture and rural development.

(Para 10.4)

XI. RURAL MARKETING

110. The objectives of an efficient rural marketing system are :—

- (a) to enable the primary producers to get the best price ;
- (b) to provide facilities for lifting of produce which the producers are willing to sell at a reasonable price ;
- (c) to reduce the price spread between the primary producers and ultimate consumers ;
- (d) to make available all products of farm origin to consumers at a reasonable price without impairing the quality of the produce.

(Para 11.4)

111. Notwithstanding all the efforts taken and investments made so far in organising and developing the assembling markets, roughly one-fifth of the marketable surplus in the case of food crops and half to the three fourths in the case of commercial crops do not seem to be coming to the assembling market at all. There has so far been no concerted efforts for development of marketing infrastructure in most of the States.

(Para 11.9)

112. The Ministry of Rural Reconstruction should look into the question of levy of market fees and give general guidance as to what should

constitute a reasonable market fees which should provide adequate income not only to cover the running cost but also essential developmental facilities including internal roads, which limits the producers using the markets.

(Para 11.14)

113. Any amount of efforts to increase the productivity of the backward areas would be infructuous unless the producer is assured of an incentive return on his produce. What is thus needed is that a regulated market should not be far away from the village. It will be ideal if this facility could be treated at a place as near as possible and in general within a radius of 5 Kms. a distance negotiable by foot or cart within an hour.

(Para 11.16 & 11.17)

114. The Committee would, recommend that wherever focal point approach is adopted, priority should be given either to convert the "shandy" where existing into a regulated market or where no stand or haat exists to set up a new regulated market.

(Para 11.18)

115. The National Commission on Agriculture had recommended certain minimum facilities, to start with, in these sub-markets and assembly markets (para 56.1.2) which are indicated below :

- (i) Physical facilities for grading, weighing and storage should be available in the market.
- (ii) There should be an agency which should take charge of the cultivator's produce, advance him money for his immediate needs, process the produce, arrange for further marketing at the next point and then make final payment.
- (iii) An alternative of personal dealing and disposal should also be available to the cultivator.
- (iv) There should be means of communication for market information i.e. Post and Telegraph Office with a provision for telephone.
- (v) Shops selling production inputs and domestic necessities should be available to the producer in the localities where markets are situated.
- (vi) Facility of inter-village and intra-village road communication should exist in the proposed market area.

The Committee would endorse the above recommendations as it considers that these are the minimum facilities required.

(Para 11.8)

116. The Committee would suggest that in the backward areas, there should be at least one regulated market in each project to which the assembly and sub-markets could be linked. It would also suggest that steps should be taken immediately, where necessary, to notify the commodities which have not yet been covered under the market legislation, particularly cash crops, livestock, livestock products, fruits and vegetables.

(Para 11.9)

117. The Shandies/Haats, which are to be developed either as assembly markets or sub-markets, and majority of which are likely to be below the level of taluka headquarters, would require to be treated on special footing by providing necessary finances to improve their physical facilities and working capital. These assembling markets and sub-markets may not be able to devote necessary funds for providing physical facilities in the initial stages.

(Para 11.20)

118. The Committee would strongly urge that all State Governments should create a "Market Development Fund" to which the market committees in the State should contribute a certain percentage of market revenue and the State Governments contribute matching grants. With this Fund and the assistance available from the Central Government it could be possible to develop existing shandies/haats into assembling maintain too many purchasing points of their Year Plan.

(Para 11.21)

119. The Committee would also recommend that the present procurement agencies like the Food Corporation of India, the Jute Corporation of India and the Cotton Corporation of India etc. should strengthen their relationship with cooperative structure and encourage them to perform this purchasing activity rather than maintain too many purchasing points of their own.

(Para 11.24)

120. The endeavour of the State Government should be to develop the cooperative marketing structure and its apex organisations so as to make them more effective tools in building up an efficient rural marketing system, and strengthen the functional bonds between the apex bodies at the State level and the concerned national institutions, wherever they exist.

(Para 11.24)

121. The Committee would recommend licensing of all market functionaries compulsorily without exception. Also in view of the limited

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service rendered brokers should be phased out from the market; they could be persuaded to become commission agents. The weighing of produce should be done by the market committees. Only produce graded and weighed should be handled over to the commission agents according to the choice of the producers/sellers. The practice of commission agent making payment to the producer-seller is not a sound practice and a system of payment through banks located in all regulated markets has to be popularised.

(Para 11.25)

122. Commodities have to be stored at farm level before marketing at market level at processing plants and at the level of wholesale and retail trading. The Committee would recommend that improved methods of storage at the farmer's level should be popularised.

(Para 11.26 & 11.27)

123. There is need for special efforts to construct storages in rural areas i.e. at each of the assembly or sub-market centres suitably linking them with the storage facilities at the wholesale and terminal markets. This is quite important in the case of backward areas.

(Para 11.28)

124. It is essential that, depending on the production potential and the need for sale, each Integrated Development Authority should be sure that adequate cold storage facilities are available at some of the selected points.

(Para 11.29)

125. The Committee would strongly urge that the Agricultural Committees and the Cooperative Societies, particularly at the focal points must take in hand the primary processing of the important commodities produced in these areas.

(Para 11.30)

126. As regards the agroprocessing industries, the Committee would invite attention to its detailed recommendations in regard to the development of agroprocessing industries in para 8.53 to 8.56 of its report on "Industrial Dispersal". An agroprocessing unit is best located at a central point of production of the particular agricultural produce. The regulated and other markets can play a very important role in this regard. What the Committee would suggest is to organise the necessary agroprocessing industries at the market yard or nearby which is the collecting centre for the produce. The recommendation made in the report referred to earlier need to be pursued.

(Para 11.31)

XII. ORGANISATION AND ADMINISTRATION

127. The effective implementation of the strategy for the development of backward areas will require substantial strengthening and streamlining of administration as well as changes in the modalities of financing and implementation of development projects. The National Committee recognised the importance of this aspect and therefore dealt with it in its very first report on Organisation of Administrative and Financial Structures for Backward Area Development.

(Para 12.1)

128. The Committee would emphasise that effective administration is the key to rapid development in backward areas. The crucial elements that determine the success of administration are effective co-ordination, the quality of personnel and clarity in the relative role of administration and institutions.

(Para 12.20)

129. The National Committee in its report on the organisation of administrative and financial structure for backward areas development has suggested a certain approach to planning and implementation. It has indicated that the essential requirement of planning and administration at the areas must be as follows :

- (a) It must offer coordination of the political, administrative and local institutions for determining the programme of development for the area and the manner in which it can be implemented, thus enabling direct interaction between citizens, panchayati raj bodies, non-official agencies like cooperatives and implementing agencies.
- (b) It must bring together all the administrative operations at the area level under effective coordination and a minimum effective control of a single agency to be able to effectively counteract the powerful forces of centralisation and fragmented decision making, associated with vertical administrative hierarchies dealing with separate segments of the economy.
- (c) It must provide an effective mechanism for formulating a programme of development based upon the local resources, needs and expectations of the people.

(d) It must interact with the existing institutions and local bodies and bring an administrative cohesion in these bodies by persuasion and get an agreed participation in the development programme with specific responsibility for their part in the programme.

(e) It must clearly lay down a programme of work for the participating agencies which would be made responsible for the proper execution of their respective assignments.

In pursuance of this approach the Committee has suggested a project approach on the pattern of the integrated tribal development project for the total development of the project areas.

(Para 12.21 & 12.22)

130. The Committee has made certain specific recommendations to meet the problem of personnel in backward areas. The recommendations of the Committee involve a resort to a measure of compulsion as well as grant of incentives and provision of facilities. The Committee in its report has noted with regret that a culture seems to be developing in the country with those who have got into the administrative and technical field that they are entitled to the best that country can give and that they should not be asked to move to backward areas. There are of course, problems of incentives and facilities but the important point is that the country has right to expect exertion from the development staff and technologists. A sociological pressure has to arise so that needs of backward areas can be met. It is equally important that the Governments and States strictly ensure that posting of officers and staff to the backward areas based on logical approach are not cancelled, whatever be the pressure, political or otherwise.

(Para 12.28)

131. The Committee has noted with regret that politics has started playing a very crucial role in the matter of transfer and postings. There is a need to restore discipline in the administrative machinery so that the transfers are not circumvented by officials through the help of politicians. Existing government instructions in this regard must be implemented.

(Para 12.28)

132. Coordination is a management problem. The essential needs of coordination are :—

- (i) The coordination must have a bird's eye view of the whole complex and broadly understand interplay of the several parts in the functioning of the system.

(xv)

(ii) When systems are large, each functional component should be given full freedom to work with decentralised authority to the head in charge of the function.

(iii) The coordinator should not treat himself as an expert in any of the functions and over-rule the head incharge of the functions, but bring out the problem at the coordination level for a consensus.

(iv) The coordinator does not impose decisions but arrives at an acceptable consensus in which he will have to take a

guiding role on the basis of his understanding of the inter-play of the functions in the system.

(Para 12.32)

133. The most important thing is that coordination is not merely a matter of systems. It will require an ability in each officer to see himself as part of a local team. It will also require skillful management of people by the head of the coordination system, whether he be a project officer or the chairman of a coordination committee. These things can come about not merely by the institution of systems but by the gradual evolution of working practices.

(Para 12.33)

I. INTRODUCTION

The problem of backward area development has been a major concern of the planning process in India for many years and a variety of policies and programmes for accelerating the development of these areas have been tried out. At the time of formulation of the 1978—83 Plan, it was felt that the working of these various programmes, needed to be reviewed and a suitable strategy for the development of backward areas formulated. The Planning Commission, therefore, decided to set up the National Committee on the Development of Backward Areas. The resolution setting up this Committee is at Annexure 1.1.

1.2 The terms of reference of the Committee as stated in the resolution are as follows:—

- (i) To examine the validity of the various concepts of backwardness underlying the definitions in use for present policy purposes and recommend the criteria by which backward areas should be identified,
- (ii) To review the working of :—
 - (a) the existing plans for dealing with the general developmental problems of backward areas like Tribal Sub-Plans, Plans for Hill Areas etc., and
 - (b) the existing schemes for stimulating **industrial development in backward areas** such as the schemes for concessional finance, investment subsidy, transport subsidy, sales tax concessions etc. similar schemes in the agricultural and allied fields like DPAP, and general measures for tackling the problems of poverty and unemployment with a view to find out their efficacy in the removal of backwardness; and
- (iii) To recommend an appropriate strategy for strategies for effectively tackling the problem of backward areas, classified, if necessary, according to areas, causes of or prescribed remedies.

1.3 The composition of the National Committee on the Development of Backward Areas and the changes which have taken place since the inception of the Committee are indicated in the Resolution setting up the Committee and the subsequent amendments which are reproduced in the Annexure 1.1. The Chairman of the Committee, Shri B. Sivaraman, was formerly Member,

Planning Commission. Besides the Chairman, the Committee included members with a wide range of experience in development administration in different parts of the country, industrial administration, scientific and economic research, and economic planning. It may be noted that all members of the Committee including the Chairman and the Member-Secretary have been part-time members who have contributed to the work of the Committee in addition to their normal duties.

1.4 Originally the term of the Committee was upto 31st December, 1979. However, the extensive terms of reference specified in the Resolution involved collection of a vast amount of factual data, field studies, scrutiny and analysis of material obtained from different sources and discussions with government officials and other experts. The term of the Committee had to be extended, the final extension being upto 30th November, 1981. The Committee submitted first report on organisation of Administrative and Financial Structures for Backward Areas Development to the Planning Commission in September, 1980. Upto and including the present report, the Committee has submitted eleven reports to the Planning Commission over a period of 14 months.

1.5 The work of the Committee was inaugurated on 8th February, 1979 by Professor. D. T. Lakadawala, the then Deputy Chairman of Planning Commission. Since then the Committee has had 25 meetings. The dates of these meetings are indicated in Annexure 1.2.

1.6 At the start of its work, the Committee decided to set up Working Group on the following subjects :—

- (1) Organisational Structures for Development of Backward Areas.
- (2) Rural Development.
- (3) Tribal Development.
- (4) Industrial Development.

All the Working Groups were chaired by the Chairman of the National Committee. The membership of these Working Groups is indicated in Annexure 1.3 Members of the National Committee also attended meetings of the Working Groups. It will be seen that the Working Groups included a wide range of expertise from the Centre, the States, Research Institutions and the Financial Institutions involved in the industrial and rural development. Though the Working Groups did not submit separate reports, the reports of

the National Committee were discussed and developed by the Working Groups and finally approved by the National Committee.

1.7 In order to widen the process of consultations, the National Committee decided to organise a series of seminars in collaboration with various organisations. The main purpose of these seminars was to involve research workers, knowledgeable academicians and key administrators in common forum. In all five seminars were held dealing with the following:—

- (a) Tribal areas.
- (b) Hills Areas.
- (c) Industrial Development of Backward Areas.
- (d) Desert and Drought Prone Areas.
- (e) Village and Cottage Industries.

The venue, the date and collaborating organisation for each of these seminars is indicated in Annexure 1.4. A seminar on the development problem on the north-west was arranged but could not be held. However, the papers prepared for that seminar were utilised by the Committee in drawing up its report on the Development of North-Eastern Region.

1.8 The Committee felt that its work required a systematic field study on the impact of rural development programmes. This could not be done on a comprehensive basis and the Committee selected two districts each in Madhya Pradesh, Orissa, Tamil Nadu and Karnataka for purposes of detailed study. At its request the Planning Commission commissioned three research studies covering these four States. The list of studies and the organisations which conducted them are at Annexure 1.5. At the Committee's request IDBI commissioned a series of studies on the problem of industrial dispersal. In addition, at the request of the Committee several States prepared study reports on local level administration.

1.9 At an early stage in its work the Committee was faced with paucity of information on the subjects which it had to handle. Hence a detailed questionnaire on various aspects of backward areas development was prepared and sent to the States in September, 1979. Unfortunately the responses of the State Governments to the questionnaire was rather poor and partial responses were received only from a few States. Details are in Annexure 1.6.

1.10 The terms of reference of the Committee required it to evaluate the working of existing programmes. Though the Committee and the Working Groups it set up included a large number of persons with field experience, it was

felt that direct field level investigations by the members of the Committee would be desirable. A list of the field level visits undertaken by the (CRAFICARD). The field visits undertaken by is at Annexure 1.7. The Chairman the National Committee also headed another Committee on Rural Credit set up by the Reserve Bank of India (CRAFICARD). The field visits undertaken by the Chairman for this Committee also contributed to the work of the National Committee.

1.11 Most of the subjects dealt with by the National Committee involved actions by the State Governments and the Committee felt that consultations with State Governments were necessary. In order to do this, the Committee prepared certain papers and circulated them to the State Governments for comments and suggestions. A list of the papers circulated for comments is at Annexure 1.8. Besides this, representatives of State Governments were invited to the seminars referred to earlier. The Committee also visited selected State capitals and held discussions with State Governments on the full range of its terms of reference. The State Governments with whom discussions were held and the dates of these discussions are listed in Annexure 1.9.

1.12 The terms of reference of the Committee covered a large variety of problems which required separate treatment. The Committee felt that each of these subjects could be dealt with in a separate report. Hence the Committee has submitted the results of its deliberations in the form of eleven reports including the present one. These reports deal with the following subjects:—

- (1) Organisation of Administrative and Financial Structures for a backward area development (Submitted in September 1980).
- (2) Industrial Dispersal. Submitted in October 1980).
- (3) Development of Backward Hill Areas. (Submitted in March 1981).
- (4) Village and Cottage Industries (Submitted in March 1981).
- (5) Development of Tribal Areas. (Submitted in June 1981).
- (6) Industrial Organisation. (Submitted in July 1981).
- (7) Development of Drought Prone Areas and Desert Areas. (Submitted in September 1981).
- (8) Development of Coastal Area Affected by Salinity. (Submitted in November 1981).
- (9) Development of Chronically Flood Affected Areas. (Submitted in November 1981).

- (10) Development of North Eastern Region (Submitted in November 1981).
- (11) General Issues relating to Backward Areas Development. (Submitted in November 1981).

1.13 The present report, which is eleventh in the series deals with certain general issues relating to backward area development. The Committee would emphasise that it is a final report in the sense that it covers the full terms of reference of the Committee. Though it contains a summary of the earlier reports, it has to be read along with the other ten reports submitted by the Committee to get an overall picture.

1.14 A large number of persons have contributed to the work of the Committee. At the outset the Committee would like to express its gratitude to Professor D. T. Lakdawala who initiated the work of the Committee when he was Deputy Chairman of the Planning Commission. His deep sense of concern about the problems of backward area development and the guidance that he provided was of great value to the Committee. The Committee has also benefited from the interest shown and the support extended by Shri N. D. Tiwari both during his tenure as Deputy Chairman, Planning Commission and as Union Minister for Industry. Shri S. B. Chavan took over as Deputy Chairman, Planning Commission in the final stages of the Committee's work. His interest and concern have been a great support to the Committee.

1.15 The Committee got valuable assistance and cooperation from the administrative and technical officers of the Planning Commission, Ministries of Rural Reconstruction, Agriculture, Industrial Development, Home Affairs, Commerce, Finance, the North-Eastern Council, the State Governments, the Khadi and Village Industries Commission, the Commercial Banks, the Commodity Boards, the Handloom Commission, the Industrial Development Bank of India and the National Small Industries Corporation. We are grateful to all of them.

1.16 The members of the Working Group set up by the Committee have had to bear much of the burden of the work. They prepared many background papers and special reports for the Committee and their contribution to the discussions helped the Committee greatly. We are grateful to all of them for time and the effort that they have spared for the work of the Committee.

1.17 The papers read at the seminars referred to earlier were of great value to the Committee. We are grateful to the authors of the papers presented at these seminars and also to the collaborating organisations viz., Tribal and Harijan which they fulfilled their duties.

Research Institute, Bhubaneswar, Giri Institute of Development of Studies, Lucknow; HCM Institute of Public Administration, Jaipur; Industrial Development Bank of India and National Small Industries Corporation. We are grateful to the Planning Commission, the Ministries of Home Affairs and Industrial Development and the concerned State Governments who helped to finance and to organise the Seminars.

1.18. The field visits undertaken by the Chairman and other members of the Committee as also the State level discussions required a great deal of support from the State Governments and their officers. The Committee is grateful to all of them for the excellent arrangements made.

1.19 The Committee would like to place on record the excellent assistance given by the Member-Secretary Shri Nitin Desai in organising the work of the Committee and in helping substantially in the discussions. This naturally added a very substantial load of work to his normal work in the Planning Commission. The Committee is thankful to him for the help given. The Committee also wishes to place on record the excellent contribution of Shri Hit Prakash, Consultant, who with his substantial experience in handling rural problems and particularly work relating to the various special area programmes, was able to help in assessing the material and helping the Committee to avoid pitfalls. The full time staff of the Committee on the research side consisted of Sarvashri S. S. Ahluwalia, Assistant Secretary-cum-O.S.D. (Research), G. P. Bharal, Senior Research Officer, A. A. Ramino, Senior Research Officer, S. S. Sangal, Research Officer and Smt. Debika Roy, Economic Investigator. The entire team lead by the Assistant Secretary-cum-O.S.D. (Research) had to put in many months of hard work preparing papers for discussion, draft reports, etc. The Secretariat side of the Committee's work was handled under the overall guidance of the Member-Secretary and with the help of the Assistant Secretary-cum-O.S.D. (Research) by Shri E. V. Joseph (from inception to June 1980), Shri Vikas Chander Kajla (from 10th July 1980 to 18th May, 1981), and Shri N. S. Saini (from 19th May 1981 to 30th November, 1981). Shri Kajla continued to assist in the work of the Committee even after his formal transfer on 18-5-1981. Sarvashri M. N. Banerjee, A. Rama Rao, K. C. Arya, H. C. Grover, J. C. Bajaj and Narendra Kumar provided the stenographic and typing assistance to the Committee while Sarvashri S. K. Bhardwaj, Uday Das and U. K. Maini helped on the administrative side. The Committee is grateful to all the Members of the Research and Secretariat staff for the diligence and dedication with

Resolution setting up the National Committee on the Development of Backward Areas and Subsequent Amendments

No. PC(P)17/NCDBA/78-MLP

Government of India
Planning Commission.

Yojana Bhawan, Sansad Marg,
New Delhi-110001.

Dated the 30th November, 1978

The Government have been pursuing certain policies and programmes in regard to the development of backward areas since the Fourth Five Year Plan. It is now necessary to review the working of these various programmes and to set out a suitable strategy or strategies for the development of backward areas in the context of the priorities and objectives set out in the draft 1978—83 Plan. The Planning Commission have, therefore, decided to set up a high level Committee to formulate appropriate strategy or strategies for effectively tackling the problems of backward areas. The Committee will be termed the National Committee on the Development of Backward Areas. Its composition and terms of reference are as set out below :—

COMPOSITION

Chairman

1. Shri B. Sivaraman, Member, Planning Commission.

Members

2. Shri Som Dutt, Chairman, Khadi and Village Industries Commission.
3. Prof. Marinal Datta Chaudhary, Delhi School of Economics.
4. Shri S. S. Marathe, Secretary, Department of Industrial Development.
5. Shri Ranchor Prasad, Adviser Department of Rural Development, Government of Bihar.
6. Shri Ramakrishanayya, Deputy Governor, Reserve Bank of India.
7. Shri K. P. A. Menon, Additional Secretary, Department of Rural Development, Ministry of Agriculture and Irrigation.
8. Shri R. M. Honavar, Chief Economic Adviser, Department of Economic Affairs, Ministry of Finance.
9. Dr. S. A. Davé, Executive Director, Industrial Development Bank of India.
10. Dr. Y. Nayudamma, Central Leather Research Institute, Madras.

11. Shri Anand Sarup, Secretary, Department of Planning, Government of Uttar Pradesh.
12. Dr. B. D. Sharma, Tribal Development Commissioner, Government of Madhya Pradesh.
13. Shri Suresh Mathur, Development Commissioner, Manipur.
14. Dr. D. M. Nanjundappa, Secretary, Department of Planning, Government of Karnataka.

Member-Secretary

15. Shri Nitin Desai, Consultant, Planning Commission. The Committee may, if necessary, constitute Sub-Groups and co-opt Members.

TERMS OF REFERENCE

1. To examine the validity of the various concepts of backwardness underlying the definitions in use for present policy purposes and recommend the criteria by which backward areas should be identified.

2. To review the working of :—

- (a) Existing plans for dealing with the general development problems of backward areas like Tribal Sub-Plans, Plans for Hill Areas etc. and
- (b) Existing schemes for stimulating industrial development in backward areas such as the schemes for concessional finance, investment subsidy, transport subsidy, sales tax concessions etc. similar schemes in the agricultural and allied fields like DPAP, and general measures for tackling the problems of poverty and unemployment with a view to find out their efficacy in the removal of backwardness; and

3. To recommend an appropriate strategy or strategies for effectively tackling the problem of backward areas, classified, if necessary, according to areas, causes or prescribed remedies.

The Committee may, depending on the requirements, get any study relating to any aspect of backward area development carried out by expert bodies.

The Headquarters of the Committee will be at New Delhi. The Committee as a whole or in part may meet as often as in New Delhi or any other place as may be decided by the Chairman of the Committee.

The Committee will submit its Final Report by 31st December, 1979.

ORDER

Ordered that a copy of the Resolution may be communicated to all concerned and that it may be published in the Gazette of India for general information.

Sd/- Y. Mohan
Director (Administration)

CHANGES IN MEMBERSHIP

No PC(P) 17/NCDB/78-MLP

Government of India
Planning Commission.

Yojana Bhawan, Sansad Marg,
New Delhi-110001.

Dated the 15th July, 1980.

RESOLUTION

In continuation of the Planning Commission resolution of even number dated the 30th November, 1978 regarding the setting up of the National Committee on the Development of Backward Areas, it is notified that Prof. Marinal Datta Chaudhary, Delhi School of Economic has ceased to be a Member of the National Committee on the Development of Backward Areas with immediate effect.

Sd/- Y. Mohan
Director (Administration)

No. PC(P) 17/NCDBA/78-MLP

Government of India
Planning Commission.

New Delhi the 4th January, 1981.

RESOLUTION

In continuation of the Planning Commission resolution of even number dated the 30th November, 1978 regarding the setting up of the National Committee on the Development of Backward

Areas, it is notified that Shri S. S. Marathe, Secretary, Retired, Department of Industrial Development, Government of India, has ceased to be a Member of the National Committee on the Development of Backward Areas with immediate effect.

It is also notified that Shri S. M. Ghosh, Secretary, Department of Industrial Development, Government of India, has been nominated as Member of the NCDBA with immediate effect.

Sd/- Y. Mohan
Director (Administration)

No. PC(P) 17/NCDBA/78-MLP

Government of India
Planning Commission.

New Delhi the 25th November, 1981.

RESOLUTION

In continuation of the Planning Commission resolution of even number dated the 30th November, 1978 regarding the setting up of the National Committee on the Development of Backward Areas, it is notified that Dr. R. M. Konavar, Chief Economic Adviser (Retired), Department of Economic Affairs, Ministry of Finance, has ceased to be a Member of the National Committee on the Development of Backward Areas with effect from 31st January, 1981.

Sd/- R. S. Saxena
Director (Administration)

EXTENSION OF THE TERM OF THE COMMITTEE

No. PC(P) 17/NCDBA/78-MLP

Government of India
Planning Commission.

New Delhi the 5th November, 1979.

RESOLUTION

The term of the National Committee on the Development of Backward Areas set up by the Planning Commission vide its resolution of even number dated the 30th November, 1978 has been extended upto 30th June, 1980.

Sd/- Y. Mohan
Director (Administration)

No. PC(P) 17/NCDBA/78-MLP

Government of India
Planning Commission.

—
New Delhi the 18th April, 1980.

RESOLUTION

The term of the National Committee on the Development of Backward Areas set up by the Planning Commission vide its resolution of even number dated the 30th November, 1978 and extended upto the 30th June, 1980 vide its resolution of even number dated the 5th November, 1979 has been further extended upto 31st December, 1980.

Sd/- Y. Mohan
Director (Administration)

New Delhi the 20th November, 1980.

Government of India
Planning Commission.

—
New Delhi the 20th November, 1980,

RESOLUTION

The term of the National Committee on the Development of Backward Areas set up by the Planning Commission vide its resolution of even number dated the 30th November, 1978 and extended upto 31st December, 1980 vide its resolution of even number dated the 18th April, 1980 has been further extended upto the 30th June, 1981.

Sd/- Y. Mohan
Director (Administration)

No. PC(P) 17/NCDBA/78-MLP

Government of India
Planning Commission.

—
New Delhi the 29th April, 1980

RESOLUTION

The term of the National Committee on the Development of Backward Areas set up by the Planning Commission vide its resolution of even number dated the 30th November, 1978 and extended upto 30th June, 1981 vide its resolution of even number dated the 20th November, 1980 has been further extended upto 31st October, 1981.

Sd/- R. S. Saksen
Director (Administration)

No. PC(P) 17/NCDBA/78-MLP

Government of India
Planning Commission.

—
New Delhi the 29th September, 1981.

RESOLUTION

The term of the National Committee on the Development of Backward Areas set up by the Planning Commission vide its resolution of even number dated the 30th November, 1978 and extended upto 31st October, 1981 vide its resolution of even number dated the 29th April, 1981 has been further extended upto 30th November, 1981.

Sd/- R. S. Saksena
Director (Administration)

Dates of Meetings of the National Committee on the Development of Backward Areas

Meetings	Dates	Meetings	Dates
1st	8-2-1979	16th	6-4-1981
2nd	16-4-1979		8-4-1981
3rd	18-5-1979		24-4-1981
4th	21-7-1979		25-4-1981
5th	21-9-1979	17th	21-5-1981
6th	7-12-1979		to
7th	6-3-1980		25-5-1981
8th	21-6-1980	18th	8-6-1981
9th	25-7-1980	19th	1-7-1981
10th	30-8-1980		to
11th	22-9-1980		9-7-1981
	to		and
	26-9-1980		29-7-1981
12th	21-10-1980		30-7-1981
	to		31-7-1981
	25-10-1980	20th	17-8-1981
13th	24-11-1980		to
	to		24-4-1981
	30-11-1980	21st	3-9-1981
14th	10-1-1981		to
	12-1-1981		28-9-1981
	13-1-1981	22nd	15-10-1981
15th	2-3-1981		16-10-1981
	to		17-10-1981
	10-3-1981	23rd	28-10-1981
	and	24th	12-11-1981
	23-3-1981	25th	30-11-1981
	to		
	26-3-1981		

LIST OF WORKING GROUPS MEMBERS

 Working Group on Organisational Structures
for Development of Backward Areas

I

CHAIRMAN Shri B. Sivaraman I

Shri N.A. Ramasubramaniam/

Shri P.P. Nayyar,

Chief Secretary,

Government of Bihar,

PATNA

Shri S.S. Tinaikal,

Planning Secretary,

Government of Maharashtra,

BOMBAY

Shri B.R.P. Vitall,

Planning Secretary,

Government of Andhra Pradesh,

HYDERABAD

Shri S.K. Bhatnagar,

Agricultural Production

Commissioner,

Government of Uttar Pradesh,

LUCKNOW

Shri P.H. Vaishnav,

Joint Secretary,

Planning Commission,

NEW DELHI

Shri A.S. Puri,

Chief General Manager,

Planning & Coordination,

State Bank of India,

BOMBAY-400021

Shri Y.S. Borgaonkar,

Agricultural Refinance,

Development Corporation,

Dr. Annie Basant Road,

PB No. 6552, Worli,

BOMBAY-400018

Shri Hit Prakash,

Consultant, Planning Commission,

NEW DELHI

Shri K.S. Chandershekher,

Member, Board of Revenue,

Government of Orissa,

CUTTACK

Shri M.A. Khan,

Secretary,

Department of Agriculture,

Government of Gujarat,

GANDHINAGAR

Shri H.B.N. Shetty,

Secretary Rural Development,

Government of Tamil Nadu,

MADRAS

Shrimati S. Satyabhama,

Joint Secretary,

Ministry of Rural Reconstruction,

Krishi Bhawan,

NEW DELHI

Shri Vinod K. Dhall,

Director (Banking Division)

Department of Economic Affairs,

Jeevan Deep, Parliament Street,

NEW DELHI

Dr. N.K. Thinkalaya,

Chief Economist,

Syndicate Bank,

Manipal 567119

KARNATAKA

Shri Nitin Desai,

Adviser,

Planning Commission,

NEW DELHI

Working Group on Rural Development

II

CHAIRMAN : Shri B. Sivaraman

Shri G.L. Bailur,

Joint Secretary,

Ministry of Rural

Reconstruction,

NEW DELHI

Shri D.R. Bhambla,

Agricultural Production

Commissioner,

Deptt. of Agriculture,

Ministry, of Agriculture

NEW DELHI

Shri Sharvan Kumar,

Secretary,

Department of Revenue,

Government of Andhra Pradesh

HYDERABAD

Shri R. Srinivasan,

Joint Secretary,

Deptt. of Industrial

Development,

NEW DELHI

ANNEXURE 13—contd.

Shri U.S. Kang,
C/o Dr. Kang,
42, Sector VII,
CHANDIGARH

Shri K.K. Srivastava,
Director General (Tourism)
Transport Bhawan,
NEW DELHI

Adviser, (Agriculture)
Planning Commission
NEW DELHI

Shri Nitin Desai,
Adviser,
Planning Commission,
NEW DELHI

Shri A.J.S. Sodhi,
Joint Secretary,
Ministry of Agriculture,
NEW DELHI

Shri R.N. Kaul/R.D. Gupta,
Joint Commissioner,
Soil Conervation and
Land Development,
Ministry of Agriculture,
NEW DELHI

Shri H.K. Khan/M.G. Shah,
Additional Chief Secretary,
Department of Agriculture,
Forest and Cooperation.
Government of Gujarat,
GANDHINAGAR

Shri T.S. Kannan,
Chairman,
National Small Industries
Corporation, Okhla Industrial
Estate,
NEW DELHI

Shri P.H. Vaishnav,
Joint Secretary,
Planning Commission,
NEW DELHI

Shri C.K. Modi,
Joint Secretary,
Department of Industrial
Development, Udyog Bhavan,
NEW DELHI

Shri Hit Prakash,
Consultant,
Planning Commission,
NEW DELHI

Shri K.L. Beraya,
No. 584, Tilar Nagar,
JAIPUR
(Rajasthan)

Working Group on Tribal Development
III

CHAIRMAN : Shri B. Sivaraman
Shri K.K. Srivastava,
Director General (Tourism)
Tourism Department,
Transport Bhawan,
NEW DELHI

Shri M. Bhattacharya,
Secretary, Scheduled Castes
and Scheduled Tribes Welfare
Department
Government of West Bengal,
Writers' Building,
CALCUTTA

Shri Vijay Verma,
Tribal Area Development
Commissioner,
Government of Rajasthan,
JAIPUR (Rajasthan)

Shri Ramakant Mishra,
Revenue Divisional
Commissioner,
Central Division
CUTTACK, (Orissa)

Shri R.V. Bhatt,
Secretary-cum-Development
Commissioner, Education,
Labour, Social Welfare
and Tribal Department,
Government of Gujarat,
GANDHINAGAR

Shri S. Jambunathan,
Secretary and Tribal
Development Commissioner,
Sports & Social Welfare
Department,
Government of Maharashtra,
BOMBAY.

Shri Nitin Desai,
Adviser,
Planning Commission,
NEW DELHI .

Shri Bhupinder Singh,
Joint Secretary,
Ministry of Home Affairs,
NEW DELHI .

ANNEXURE 1'3—concl'd.

Shri N. Nagamani, .
Regional Development
Commissioner,
Government of Bihar,
Andrew House,
Raj Bhawan Compound,
RANCHI (Bihar)

Dr. B.D. Sharma,
Tribal Development
Commissioner,
Government of Madhya Pradesh,
BHOPAL

Shri T.N.R. Rao,
Secretary,
Department of Employment and Social Welfare,
Government of Andhra Pradesh,
HYDERABAD

Shri D.K. Gangopadhyaya,
Secretary,
Tribal Areas and Welfare of Backward Classes
Department,
Government of Assam,
DISPUR, (Gauhati)

Shri R.S. Seetharamdas,
Secretary-cum-Commissioner,
Social Welfare Department,
Government of Tamil Nadu,
MADRAS

Shri Hit Prakash,
Consultant,
Planning Commission,
NEW DELHI

Working Group on Industrial Development

IV

CHAIRMAN : Shri B. Sivaraman

Shri K.P.A. Menon/D.K. Kaul,
Secretary,
Ministry of Defence,
NEW DELHI

Shri R. Srinivasan,
Joint Secretary,
Department of Industrial
Development,
NEW DELHI

Dr. P. Asthana,
Deputy General Manager,
Regional & Backward
Development Department,
Industrial Development Bank
of India, New India Centre,
17-Cooperage,
BOMBAY-400039

Economic Adviser,
Department of Industrial
Development,
NEW DELHI

Shri M. Satyapal,
Adviser (I&M)
Planning Commission
NEW DELHI

Shri Nitin Desai,
Adviser,
Planning Commission
NEW DELHI

Shri B.K. Sharma,
Joint Secretary,
Department of Rural Development,
NEW DELHI

Shri B.C. Patnaik/Vinod K. Dhall,
Director (Banking),
Department of Economic Affairs,
Jeevan Deep,
Parliament Street,
NEW DELHI

Shri S.N. Dalal,
Director,
Division of Field Surveys,
Economic Department,
BOMBAY

Shri C.K. Modi,
Adviser (V&I)
Planning Commission,
NEW DELHI

Shri Hit Prakash,
Consultant,
Planning Commission,
NEW DELHI

Dates, Venue Theme and Meetings Collaboration Organisation for Seminars

Theme	Venue	Date	Collaborating Organisation
1. On Developmental Aspects of Tribal Areas.	Bhubaneswar	11-11-1981 to 13-11-1981	Tribal and Harijan Research Institute, Bhubaneswar.
2. On Development of Hill Areas	Nainital	21-4-1980 to 24-4-1980	Giri Institute of Development Studies, Lucknow.
3. On Industrial Development of Backward Areas.	Bombay	16-5-1980 to 17-5-1980	I.D.B.L.
4. On Development of Desert and Drought Prone Area.	Jaipur	6-3-1981 to 8-3-1981	H.C.M. Institute of Public Administration, Jaipur.
5. Development of Village, Cottage and Tiny Industries In Backward Areas.	Coimbatore	14-7-1980 15-7-1980 16-7-1980	N.S.I.C.

Titles and Organisations Involved in Research & Studies

<i>Title</i>	<i>Organisation</i>
1. Evaluation of Special Programmes in selected districts of Madhya Pradesh and Orissa.	Progressive Agro-Industrial Consultants, New Delhi.
2. Structure and Intervention, an evaluation of DPAP, IRDP and related programmes in Ramanathapuram and Dharampuri Districts of Tamil Nadu.	Madras Institute of Development Studies.
3. An evaluation of Special area oriented programmes Tumkur and Gulbarga Districts of Karnataka State.	Centre for Multi-Disciplinary Research, Dharwar.

States Responses to Questionnaires

Questionnaire No.	Subject	States responding
1.	Statistical Profile	Assam, Bihar, Haryana, Himachal Pradesh, Orissa, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal.
2.	Background Data	Haryana (Partly), Himachal Pradesh, Karnataka, Orissa (Partly), Punjab, Tamil Nadu (Partly) and West Bengal.
3.	General Questionnaire/Checklist on scheme for Backward areas development.	Himachal Pradesh, Karnataka, Tamil Nadu and West Bengal.
4.	Questionnaire/Checklist for schemes to promote Industrial Development of Backward Areas.	Bihar, Karnataka, Punjab, Sikkim, Uttar Pradesh and West Bengal.
5.	General Questionnaire/Checklist on Rural Development.	Punjab and West Bengal, Assam (Partly) Karnataka (Partly).
6.	Questionnaire/Checklist of DPAP	Karnataka, Maharashtra, Orissa, Uttar Pradesh and West Bengal, Tamil Nadu.
7.	Questionnaire/Checklist on Small Farmers Development Agency Programme.	Andhra Pradesh, Karnataka, Maharashtra, Punjab, Uttar Pradesh and West Bengal.
8.	Questionnaire/Checklist of Command Area Development Programme.	Karnataka, Maharashtra and West Bengal.
9.	Questionnaire for Tribal Sub-Plans.	Backward Papers prepared by concerned States.
10.	Questionnaire on Organisational Structures in States.	Haryana (Partly), Himachal Pradesh, Karnataka, Punjab and West Bengal.

Visits of Shri B. Sivaraman, Chairman, National Committee on the Development of Backward Areas

Places	Dates
1. Sunderbans	23-11-19
2. 24-Parganas	24-11-19
3. Koraput	14-12-19 to 17-12-19
4. Ropar	30-1-19
5. Sangrur	31-1-19
6. Ludhiana	1-2-19
7. Ramanathapuram	24-3-19
8. Gandhigram	25-3-19
9. Muzaffarpur	5-4-
10. Gaya	6-4-19
11. Roydighi, West Bengal	11-4-19
12. Jamtala-Jalaberia	12-4-19
13. Central Inland Fisheries Institute and Sub-station Dhauli and Brackish Water Complex at Chilka	14-2-19 and 15-2-19
14. Sunderbans	22nd and 23-2-19
15. Jodhpur	8-9-19
<i>Visits of Shri Ranchor Prasad—Member</i>	
Kinnaur, Kufri and Kanda Ghat .. .. .	.. 16th to 20th September, 198
<i>Visits of Shri Nitin Desai</i>	
<i>Member-Secretary</i>	
Vilod, Vapi (Gujarat) .. .. .	.. 26th and 27th December, 197
Sunderbans .. .. .	.. 22nd and 23rd February, 198
<i>Visits of Shri S.S. Ahluwalia</i>	
<i>Assistant Secretary-cum-OSD</i>	
Somangalam and Uttamerur .. .. .	.. 26-3-19
Banavasi Sewa Ashram Mirzapur .. .. .	.. 10th to 12th October, 1980

ANNEXURE 1.8

Papers circulated to State Governments and concerned Central Ministries including the Planning Commission for their views/reactions:—

- (i) Integrated structures of planning and implementation of a comprehensive integrated areas development programme in backward areas at Block, District and State levels.
- (ii) Administrative Structures, Manpower requirements, delegation of powers,

incentives and training staff in backward areas.

- (iii) Methodology of Central and State Plan allocations for the backward areas, budget provisions and financial control; and
- (iv) The determination of the criteria for identification of backward areas.

Dates of Discussions with State Governments

States											Dates
Haryana	..	..	..	..	..	..	..	..	..	..	12-5-19
Maharashtra	..	..	..	..	..	..	..	..	..	..	31-1-19
Orissa	..	..	..	..	..	..	..	..	..	..	18-2-19
Punjab	..	..	..	..	..	..	..	..	..	..	13-5-19
Uttar Pradesh	..	..	..	..	..	..	..	..	..	..	27-4-19
Rajasthan	..	..	..	..	..	..	..	..	..	..	4-12-19
Andhra Pradesh	..	..	..	..	..	..	..	..	..	..	27-6-19
Karnataka	..	..	..	..	..	..	..	..	..	..	26-6-19
Gujarat	..	..	..	..	..	..	..	..	..	..	29-9-19

2. PAST APPROACHES TO THE PROBLEMS OF BACKWARDNESS

In a large country like India, disparities in levels of development in different parts are inevitable. Regions differ in their history, their resource endowment and environment, the level of infrastructural development and the attitude of the inhabitants to development opportunities. However, with the growth of communications and the spread of education, knowledge about what is happening in other parts of the country spread and quite naturally the prevailing pattern of regional inequalities becomes unacceptable. There is a demand to correct these inequalities which the political and administrative system has to take note of. Because of this the problem of regional development in general and of backward area development in particular has been recognised in our plans. It is necessary to know what the plans have to say about regional aspects of development in general.

2.2 The First Five Year Plan was a pioneering exercise that recognised that, in the plan, "the regional aspect with its emphasis on the development of local resources has not been worked out sufficiently" (Chapter VII para 33, First Five Year Plan). The First Plan did not talk explicitly about the problem of regional inequalities or of backward area development except in the context of industrial location (ref. para 3.8 of Report on Industrial Dispersal, NCDBA). It appears, however, that the planners, at that time, placed some emphasis on the need to work out regional plans. Thus, the Plan states as follows :—

"Except in the smaller States, it is often desirable to prepare development programmes in terms of regions determined by physical, economic and administrative considerations. The need and priorities of different regions as well as their potential for short term and long term development should be taken into account in drawing up and continually review their development programmes".

It is unfortunate that this very laudable suggestion of a regionalisation of State and Central Plans has not been achieved even thirty years after it was first suggested.

2.3 The Second Five Year Plan dealt more explicitly with the needs of what it described as "the less developed areas". The Plan stated that resource constraints would limit the extent to

which this can be done but "as development proceeds and large resources become available for investment, the stress on development programmes should be on extending the benefits of investments to under-developed regions". (Chapter II, para 28 Second Five Year Plan). More specifically the Plan proposed that the objective of more balanced development should be attained by (a) programmes for setting up decentralised industrial production (b) consideration of the need for regional balance in the location of new enterprises and (c) steps to promote greater mobility of labour and organise schemes of migration and settlement from more to less densely populated areas.

2.4 The unusual features of the Second Plan approach is the emphasis placed on the mobility of labour from less developed to more developed areas. This has certainly taken place to some extent as is evidenced by the out migration from hill areas, the movement of migrants to the areas like the Rajasthan Canal Command and the Terai Zone in Uttar Pradesh, the large scale seasonal movements of construction labour and farm labour etc. However, it is not clear that these streams of migration except the seasonal labour movements are in fact from less developed to more developed areas. Moreover, the role of the Government in organising or facilitating these streams of migration has been limited to a few specific schemes like Dandakaranya or the Rajasthan Canal. Most of the migration has taken place because of the push and pull of economic forces. Hence the Second Plan's bold statement that "steps have to be taken to organise schemes of migration and settlement" has not been translated into action in any effective manner.

2.5 The problem of balanced regional development received much greater attention in the Third Five Year Plan when, for the first time, the Plan Document devoted a separate Chapter on the subject. The Plan took a more positive view of the possibility of reaching regional balance and stated :—

"A large country with extensive natural resources viewing each phase of its development in the perspective of a long term plan, has the means not only to realise a high and sustained rate of growth, but also to enable its less developed regions to come up to the level of the rest". (Chapter IX Para 1 Third Five Year Plan) .

2.6 The Third Plan argued that the large multipurpose projects and the implementation of agricultural production and community development programmes, and of education and health schemes "carried the benefits of development to the remotest area" (Chapter IX para 6, Third Five Year Plan). The Plan also drew attention to the programme of permanent improvements in scarcity area and the special outlays provided in the State Plans for Maharashtra and Vidarbha in Maharashtra, Eastern Uttar Pradesh and the hill areas of Punjab and U.P.

2.7 The Plan Document stated that "there are several important features in the Third Plan which enlarge the possibilities of development in areas which have in the past been relatively backward" and then goes on to list almost all the major sectors of development. The Plan reiterated the policy of using industrial location decisions as instruments for promoting balanced regional development. It focussed attention on the possibility of using large projects as the catalysts of regional growth and suggested that for the purpose "regional or area development plans should be undertaken at an early stage in the Third Plan" (Chapter IX para 18, Third Five Year Plan). Much was expected from the extension of power supply to rural areas and the development of transport and communications. The need for education and training and relatively less developed areas in which new industrial projects may be located was emphasised. The possibility of labour mobility was recognised though now the emphasis was on skill formation since "skilled and semi-skilled people can move from one area to another with much less difficulty and are absorbed more readily wherever the local economy is developing rapidly", (Chapter IX para 21, Third Five Year Plan). The Plan also pointed out the need to pay attention to the availability of competent administrative and technical personnel and on entrepreneurship development in backward areas.

2.8 By and large the approach outlined in the Third Plan is very general. The more specific and concrete suggestions in the Plan were not followed up except perhaps with regard to industrial location. Area development plans to maximise the impact of large projects have even now generally not been drawn up. Special measures to upgrade skills in backward areas have not been pursued with any vigour. There are as yet no official programme to stimulate labour mobility out of depressed regions. Entrepreneurship development programme for backward areas have been taken up only in a few cases and that also but lately. The lack of competent administrative and technical personnel continues to remain a problem in backward areas.

2.9 The concern for balanced regional growth and backward area development was thus articulated only in qualitative terms in the first

phase of the planning period upto the mid-sixties. Systematic quantitative analysis of the problem of inter-regional inequalities had not been attempted. Though several useful policy initiatives had been suggested nothing very specific was undertaken except possibly for the location of several major industrial projects in backward areas away from the industrial centres. Many of these, like the steel plants, where specific location and their establishment in the interior was largely a consequence of the fact that the bulk of the raw materials required were located there.

2.10 By the mid-sixties, however, the concern for regional balance came into prominence. The Planning Commission undertook an elaborate statistical exercise which was published in 1966 in the form of a report on "Regional Variation in Social Development and Levels of Living—A Study of the Impact of Plan Programmes". This report analysed and described at some length the extent of inter-State and inter-regional variation in consumption, unemployment, land holding, rural investment and debt, agricultural development, educational and health facilities, roads etc. The report also went on to examine more specifically the impact of certain key rural development programmes like the adoption of improved agricultural practices, minor irrigation facilities, soil conservation, school facilities, drinking water supply and other village facilities. The survey was essentially factual and restricted itself to measuring the extent of variation in quantitative terms between the States. It is significant because it illustrates the growing concern for the problem of regional disparities and because it is one of the first official document to deal with it in quantitative terms.

2.11 The growing concern for redressal of regional imbalances found expression in the Fourth Five Year Plan which was formulated in 1969-70. With regard to industrial location the Plan states that not enough had been done to restrain the tendency of new enterprises to gravitate towards metropolitan centres. While discussing the problems of inequalities the Plan stated that the strategy of intensive development of irrigated agriculture led to a concentration of effort in areas which had the capacity to respond to growth opportunities. The concern for regional inequalities was manifested in the Fourth Plan's articulation of the policy objectives for agriculture where, along with the maximisation of production, the remedying of imbalances was given equal prominence. In pursuance of this latter objective the Plan included special programmes for dry farming, for desert areas and for small farmers and agricultural labourers. This very explicit concern for neglected areas and classes was a significant shift in the orientation of development policy.

2.12 By the early seventies the problem of regional balance had come to the fore more prominently. The resolution setting up the National Commission on Agriculture dealt explicitly with this problem and stated:—

“It has become clear that besides the irrigated areas which permit of intensive development through multiple cropping and application of inputs in intensive dose, there are large tracts under rainfed agriculture requiring special attention both in the matter of evolution of the appropriate technology suited to these areas and of making available the necessary resources to the farmers” (para 4, Resolution setting up the National Commission on Agriculture).

The terms of reference of the Commission required it to deal explicitly with the:—

“Concept, potential and measures necessary for integrating area development with special reference to dry and rainfed areas, command areas of irrigation projects and remote, economically backward hilly and tribal areas” (Item F (i) in the terms of reference of the National Commission on Agriculture).

2.13 Regional variations and the specificity of regional requirements were dealt with in many parts of the Commission's reports. In its recommendations on what should be the policy objectives for agriculture, the Commission's report stated:—

“Much greater attention to the backward areas in the country like hill areas, tribal areas, low rainfall, desert and other drought prone areas, flood prone areas etc., is called for. In these areas special programmes are necessary to create facilities and harness the development potential so as to increase the levels of output, employment and income and thereby promote balanced regional development. These areas should receive due consideration to the allocation of resources for the development of the requisite infrastructures. In the cost benefit analysis for investments in these areas due regard should be paid to social returns”. (Report of the National Commission on Agriculture, Part II para 7.2.13).

This approach was expounded at greater length in Part XIII of the Commission's Report which dealt with rural employment and special area programme. In this report the National Commission outlined the strategy and policies required in special area development programmes for:—

- (i) Hill Areas.
- (ii) Tribal Areas.

(iii) Arid and Semi-arid areas.

(iv) Kutch and Sunderbans.

2.14 The growing concern for removing regional imbalances was also reflected in the discussion on industrial development. The evolution of policy in this regard has been dealt with extensively in Chapter 3 of the National Committee's Report on Industrial Dispersal, and there is no need to repeat the discussion here. The main point is that in this case too the effective action was taken in the early seventies when the schemes of Central investment and transport subsidy and concessional finance were discussed and finalised.

2.15 The concern for backward area development continued to grow during the Fourth Plan period. The debate on the incidence of poverty and how it varied between States began in this period. This debate highlighted not just the extent of mass poverty but also the inter-State variations in the percentage of population below the poverty line. The budget of 1970-71 and the White Paper “Towards Growth with Social Justice” articulated very clearly the objective of redistribution and in this context included special programmes for dryland programme and rural works in chronically drought affected areas. The mid-term appraisal of the Fourth Plan in 1971 reinforced this trend and in the annual plan for 1972-73 the rural works programme for chronically drought affected areas was converted into the Drought Prone Areas Programme, the Integrated Hill Area Programme was extended and an Integrated Programme for Dry Farming (as an extension of the Pilot Projects) was suggested. Blocks with a concentration of tribal problems had always received a special attention but in the Fourth Plan a few pilot projects on integrated development of tribal areas were started.

2.16 Thus by the time the Fifth Plan started in April 1974, the major features of the policy on backward area development had emerged. In terms of typology, desert and drought prone areas, hill areas and tribal areas were considered to be areas in need of special attention. The approach advocated focussed attention on integrated planning for a variety of activities rather than any limited sectoral programme. The special role of the Central Government in promoting the development of these backward areas was recognised. These are the elements that found full expression in the Fifth Plan. The principal innovation in this plan was the acceptance of the sub-plan approach in tribal areas. The final version of the Fifth Plan contained a very disturbing analysis of the extent of inter-district differentials in the level and rate of growth of agricultural output. This analysis highlighted the need for more effective measures to spread the agricultural revolution to new areas.

2.17 During the course of the Fifth Plan, the Planning Commission appointed an Internal Committee headed by Prof. S. Chakravarty to look into questions of backward area development. The Committee did not finalise its report but a draft report gives some indication of its approach. The draft report contains an index based exercise for the identification of backward districts which is dealt with in greater detail later in this report. However, as the Chakravarty Committee did not finalise its report, the Planning Commission naturally did not consider the recommendations contained in the available draft report.

2.18 Problems of backward area development received special attention in the first and second drafts of 1978—83 plan which was never finalised. These documents contained an extensive analysis of inter-regional and inter-State differentials. They did not suggest any new policy dimension except to focus attention on the importance of the regional approach as a complement to village, block or district planning. In this context the Plan stated:—

“Problems of backwardness cannot always be tackled at village, block or district level. There are some barriers to development that affect a whole region within a State and would not be amenable to the sort of programmes that would emerge from village, block or district plans. At the same time, it may be necessary to realise the full potential of these local level programmes. Some examples of such regionally oriented investments are as follows :—

- (i) Investment in major bridges, roads, marketing facilities or communication that could open up an area, make commercial agriculture profitable and possibly help to stimulate non-agricultural job opportunities ;

- (ii) Investment in labour training which would be of particular importance in areas where a substantial change in the occupational structure is required ;
- (iii) Encouragement of rural banks, credit cooperatives and other institutions to improve the credit net work and reduce exploitation ;
- (iv) Support for land reforms and other programmes of institutional change ;
- (v) Support for administrative changes designed to improve capabilities for plan formulation and implementation.” (Draft Plan 1978—83 as revised Para 14.22).

2.19 It is clear that the problem of regional balance and of backwardness has attracted the attention of planners. The problem has sometimes been seen in terms of inter-State disparities though there is also a recognition that there are many disparities within each State also. The emphasis has been on backwardness in terms of economic performance though the impact of historical and social factors on economic matters has been recognised. A clear concept of backwardness seems to be missing and the term is used in a more or less vague sense to designate areas that do not seem to be benefiting adequately from general development measures. The more concrete steps taken involve mainly special schemes like the subsidies for industry or the special area development programmes. Many of these special schemes are more palliatives that fail to tackle the root of the problems of backwardness. What seems to be missing is the recognition that most backward areas have a potential for growth which can be tapped if certain special initiatives are taken. The important task of planning for backward areas is to identify what these special initiatives are in each type of backward area.

3. EVALUATION OF RURAL DEVELOPMENT PROGRAMMES

General Background of Rural Development Programmes

Various rural development programmes have been introduced since the early seventies in order to promote the development of areas facing specific handicaps and to assist the development of small and marginal farmers and the landless and agricultural labourers. These programmes were begun with the realisation that the benefits of normal agricultural and rural development programmes were not reaching certain types of areas and the rural poor. Hence these programmes were designed as direct measures to reach the rural poor. Since the number of these programmes has proliferated over the last decade, the National Committee on the Development of Backward areas commissioned a number of studies to evaluate these programmes.

Methodology of Evaluation Studies

3.2 These programmes are dispersed across the country and are therefore difficult to evaluate without a large scale survey. Apart from shortcomings in the survey technique in arriving at qualitative evaluation of programmes, surveys are also very time consuming and expensive. Consequently, the NCDBA adopted a selective approach and commissioned studies* to evaluate the rural development programmes as they operate in 4 States in 2 selected districts in each. An attempt was made to maintain some uniformity between the studies even though three different institutions conducted them.

3.3 The broad objectives of the studies were as follows :—

- (i) Evaluation of the progress of existing programmes and identification of the various factors which tend to accelerate or retard progress.
- (ii) Assessment of planning strategy vis-a-vis resource endowments of the project area, identification of the target population and assessment of increase in income, employment opportunities and living conditions of people.
- (iii) Evaluation of the organisational 'Structures' of each programme at different levels and quality of linkage, availability of requisite manpower for successful implementation particularly with reference to the use of local potential.

- (iv) Assessment of the current status of, and supporting services in relation to, the various programmes including supply of inputs extension of credit and marketing facilities, etc.
- (v) Involvement of voluntary agencies and the participation of local people in the implementation of the programmes and their problems in the continuation of the programme when the basic incentive supports have been withdrawn.
- (vi) Identification of anomalies and contradictions in the socio-economic structure which tend to prevent the flow of benefits to the intended beneficiaries.
- (vii) In-depth study of a few successful programmes in the project area and identification of the special factors contributing to success.

3.4 The evaluation studies could not be undertaken in all representative regions and a selection was made so as to ensure coverage of good and poor performance areas, an adequate regional spread and coverage of all major programmes.

3.5 The districts selected for these evaluation studies were Ramanathapuram and Dharmapuri in Tamil Nadu, Jabalpur and Sidhi in Madhya Pradesh, Phulbani and Sambalpur in Orissa and Gulbarga and Tumkur in Karnataka. Naturally not all the above programmes were found to be operating in each of these districts. The table below gives the distribution of the rural development programmes that were evaluated in the districts covered :—

	SF DA ¹	DP AP ²	IR DP ³	IT DA ⁴	FF WP ⁵
<i>Madhya Pradesh—</i>					
Jabalpur ..	X		X		
Sidhi ..		X	X		
<i>Orissa—</i>					
Phulbani ..		X	X	X	
Sambalpur ..	X		X		
<i>Tamil Nadu—</i>					
Dharmapuri ..		X	X		X
Ramanathapuram ..		X	X		X
<i>Karnataka</i>					
Tumkur ..	X	X			X
Gulbarga ..	X	X			X

1. Small Farmers Development Agencies.
2. Drought Prone Areas Programme.
3. Integrated Rural Development Programmes.
4. Integrated Tribal Development Authority.
5. Food for Work Programme.

*The evaluation studies were undertaken by the following institutions.

- (i) Tamil Nadu : Madras Institute of Development Studies.
- (ii) Orissa and Madhya Pradesh : Programme Agro-Industrial Consultants, New Delhi.
- (iii) Karnataka : Centre for multi-disciplinary Research Dharwar.

Hence it was mainly the SFDA, DPAP, IRDP and Food for Work Programmes that were evaluated in the area of rural development. In addition, various rural industries programmes were also reviewed.

3.6 In order to conduct these evaluations the evaluating institutions were asked to conduct their investigations at several different levels. First, information on organisational matters, implementation procedures and difficulties etc. was obtained through discussions with officials at all the relevant levels, Secretariat, district and block levels, heads of technical departments, programme officials. Second, a purposive sample was made of blocks and villages for in-depth studies of the workings of the programmes. At least 2 blocks were to be selected in each district and at least 2 villages in each block. These selections were to be made such that one chosen block in each district was regarded as good in performance while the other as average. Similar criteria were applied in the selection of villages (i.e. 1 good and 1 average per block). The factors to be considered in the selection of blocks and villages were: date of inception of project; coverage of beneficiaries; allotment of expenditure; loan advances to farmers; progress of loan; recovery and achievements in key sectors. In fact, more villages were chosen than the minimum requirements. In Orissa and Madhya Pradesh 1 village with little impact from any of the rural development programmes was chosen from each district in addition. Thus, in these two States 5 villages were selected for investigation in each district. In Tamil Nadu, 4 blocks and 32 villages from each of the two districts were selected.

3.7 At the third level of the evaluation household questionnaires were canvassed from selected beneficiary households as well as non-beneficiary households. A comparison could then be made of the efficacy of the programme. The households were selected so that there was adequate representation of scheduled castes and tribes. The household surveys were not done to derive statistical results since the samples were small, but more to derive an in-depth understanding of problems and benefits at the household level.

3.8 All the studies found it difficult to arrive at objective and meaningful assessments of programme implementation and impact because of the lack of a systematic data base. There were no benchmark surveys in these districts which could have established the conditions existing at the inception of these programmes. The studies are therefore more qualitative and impressionistic and less quantitative and statistical than had been hoped. The in-depth nature of the studies has, however, compensated for some of these constraints and the conclusions reached are regarded as sound by the authors.

3.9 The programme evaluated. SFDA DPAP and IRDP have many common components. Moreover, in many blocks in some districts, more than one programme is found to operate simultaneously. In other districts the various rural development programmes have recently been consolidated into the IRDP. It is therefore, difficult to review these programmes separately. The working of area specific programmes like DPAP and ITDA have been reviewed in the relevant reports of the NCDEA. This review therefore provides an assessment of the workings of different components of these programmes. The major heads under which these components can be grouped are:—

- Animal Husbandry.
- Irrigation.
- Agricultural programmes.
- Soil Conservation.
- Fisheries.

An overall view of the administrative structure of these schemes is provided next since there are many similarities between districts, despite the varied nature of the schemes. A general assessment of administrative and other issues in the implementation of the programmes will be provided after the review of schemes.

The Administration of Rural Development

3.10 Different systems of administering rural development schemes have emerged historically in different States and districts as the various programmes were developed over the past decade. Thus, some districts had over-lapping programmes such as DPAP, SFDA and ITDA while other had only one programme operating. Within districts, some blocks had more than one programme operating depending on their characteristics while other had none. Recently, of course, as stated earlier, consolidation has begun to take place under the head of IRDP.

3.11 The studies generally indicate that the separate identity of programmes has been mainly under separate financial headings. Administratively, the general pattern has been a common Project Officer at the District level assisted by various Assistant Project Officers, a credit Planning Officer and Project Economist. Although the picture varies from district to district, there is usually a District level coordinating body headed by the District Magistrate (or Deputy Commissioner or Collector) and comprising of officers of the various technical depts. and a few selected non-officials. The DPAP, SFDA, IRDP organisations seldom had a direct executive role to play. They have generally tended to become mainly financing agencies. The Project Officer has to identify schemes and then persuade the concerned departments to execute them. The responsibility for minor irrigation was scattered amongst various

government departments and block level agencies. That for Soil Conservation by the Soil Conservation or Agricultural Engineering Departments, forestry with forestry departments, animal husbandry with dairy development agencies, etc. The Credit Planning Officer is supposed to prepare an annual credit plan and then allocate credit requirements among the different banks in the district. A scheme-wise, block-wise, bank branch-wise allocation of credit should be done. This is not always successfully done owing to the different interests of different banks as well as the lack of a district level credit plan in many cases. Moreover the Reserve Bank has yet to issue guidelines for the responsibilities of other than the lead banks.

3.12 At the Block level the main responsibilities lie with the Block Development Officers and Extension Officers and at the Village Level with the Village Agricultural Workers (VAO), Village Level Workers (VLW) Gram Sewak, etc. In some districts, e.g. in Orissa, even Block level development agencies are almost non-existent. A village level worker often has to cover over 20 villages with only a bicycle as his mode of transportation. The BDO is supposed to prepare a block level plan for the schemes with the assistance of the subject matter specialists/extension officers and other officers. The plan should list (i) the different development schemes for the block; (ii) the targets in terms of small farmers, marginal farmers, agricultural labourers, artisans etc. including the scheduled castes and scheduled tribes components; (iii) cost of each scheme and per unit; (iv) targetted physical achievements; (v) level of subsidy to be arranged; (vi) level of credit flow required; (vii) contribution by the beneficiaries.

3.13 These block plans are characteristically submitted to the District level for consolidation and are finally sanctioned by the State Government, after which the finance would be made available for the different schemes.

3.14 Each block is supposed to maintain a list of small and marginal farmers and agricultural labourers along with the identities of members of scheduled castes and tribes. These lists can then be used to select the beneficiaries. These lists seldom exist, and in the cases they do, they are usually outdated. As a result, the VLW is usually asked to identify beneficiaries, who then have to obtain certification as small farmers (SF) marginal farmers (MF) or agricultural labourers (AL) since the different credit schemes operate with different terms for each group. To illustrate :

- for milch animals MF and AL get loans at 11% interest rate for a repayment period of 2 years, and a subsidy element of 33-1/3 per cent. For SF the subsidy is 25 per cent.

- for sheep units, the interest rate is 9.5 per cent and maturity period of 5 years with the same subsidy element as for milch animals.
- for plough bullocks, the interest rate is also 9.5 per cent and maturity period of 3 years.
- for agricultural inputs, SF and MF are eligible for 100 per cent subsidy.

3.15 The VLWs, panchayat assistants, etc. have to usually help the beneficiaries in the preparation of forms, applications etc. for credit linked schemes. Finance is given by a very wide variety of institutions such as commercial banks, cooperative banks, land development banks and rural banks.

3.16 As mentioned earlier, schemes such as irrigation, soil conservation, forestry, fisheries, etc. are executed by the respective executing departments. Various physical surveys were supposed to have been carried out as a prelude to the schemes but have, in general, not been carried out. Hydrological or ground water surveys were to be conducted to assess the irrigation potential in each scheme district. Similarly soil conservation measures were to follow soil surveys, and so on. Lack of coordination as well as resources have militated against these plans.

3.17 The eligibility criterion for the beneficiary oriented schemes are: small farmers should own 2.5 to 5.0 acres: marginal farmers, upto 2.5 acres and agricultural labourers should derive at least 50 per cent of their income from agricultural labour. Further more, household income from non-agricultural incomes should not exceed Rs. 2400 per annum. Although, as mentioned earlier, block level lists of SF, MF and AL have not usually been kept. The studies did not find major leakages in terms of subsidies and credits going to ineligible families. (Orissa districts may be an exception to this but the evidence is inclusive). The range of leakage in terms of proportion of misclassified beneficiaries was usually less than 20 per cent. For example, in Dharmapuri District in Tamil Nadu, the proportion of large farmers who were found among the beneficiaries was 17 per cent while it was 9 per cent in Ramanathapuram District. There are further leakages in the sense of SF classified as MF, or the existence of families with more than one beneficiary. Further, there are some *benami* transactions with large farmers obtaining credit and subsidies in the names of their agricultural labourers. It is obviously difficult to quantify precisely the extent of these malpractices but the surveys conducted in the selected Tamil Nadu, Orissa, Madhya Pradesh and Karnataka districts suggest that this should not be regarded as a serious issue in the implementation of these

programmes. The leakage of this type can be reduced further if the required lists of SF, MF and AL are kept updated at the block level.

Animal Husbandry Schemes

3.18 The promotion of animal husbandry and dairy development has formed a major proportion of the activities encouraged and financed in various rural development programmes. Among the credit linked schemes, animal husbandry has usually been the most important. The activities included under this heading are assistance in the acquisition of:

- milch animals.
- sheep units.
- plough bullocks.
- poultry.
- piggeries.
- bullock carts.

3.19 The key issue in the coverage of the animal husbandry programme is that sometimes agricultural labourers have great problems in providing security for the loans. It has been found in many cases that Banks require land as security for the granting of loans for the purchase of livestock. This obviously makes agricultural labourers ineligible.

3.20 In the absence of identification registers Banks require a number of certificates to determine eligibility for loans. The certificates required may include:

- field measurement book sketch
- chitta extract
- no tax arrears
- no government loan due
- no overdue loan
- SF/MF/AL identification
- no encumbrance certificate (in the case of land)

In addition, for livestock loans banks usually require a third party guarantee, hypothecation of the animals and livestock insurance (2 to 3 per cent). All these requirements have the net effect of raising transactions costs significantly for the poor beneficiaries. It was found, for example, in most of the districts surveyed, that the cash component of these costs usually amounted to Rs. 300 to Rs. 400 on a loan of Rs. 2000 to Rs. 3000. On average, beneficiaries were found to spend Rs. 50 to Rs. 150 on processing costs in the preparation of documents, Rs. 100 to Rs. 150 on travelling expenses and Rs. 50 to Rs. 150 on other expenses (including bribes). These expenses amounted to 50 to 75 per cent of the subsidy component of loan-subsidy depending on the beneficiary's status as SF, MF or AL. It was found that since preliminary expenses were always substantial many beneficiaries had to

resort to high interest personnel loans to cover these expenses. Non-pecuniary costs of the certification process included the resultant delays as well as loan rejections arising from minor errors that are prone to be found in certificates. The prescription of such certification is also an obvious invitation to corruption. The village officials, tehsildar and revenue and cooperative inspector would normally be involved in the certification process. It is difficult to avoid documentation entirely but the maintenance of up-dated lists would also minimise the necessity for different kinds of certificates. A reduction in the number of documents required would also reduce the volume of travel and other expenses.

3.21 The surveys also revealed that the vast majority of beneficiaries in the livestock linked schemes were found in a limited and selected set of villages. These villages were usually those with better transportation linkages. In the case of milch animals, banks usually require beneficiaries to be members of milk marketing networks—cooperatives or otherwise. In Dharmapuri district 90 per cent of beneficiaries were found to be in only 50 per cent of the villages and in Ramanathapuram District 66 per cent were found concentrated in 32 per cent of villages. Similar results were observed in other states. In the case of milch animals this is appropriate since the viability of the scheme depends on the marketability of milk. Where villages are linked by marketing arrangements and are consequently in the catchment areas of urban areas the scheme has better chances of success. Other villages are simply not viable until communications improve or their own incomes increase so that local demand for milk is generated. Indeed, in the cases in Orissa and Madhya Pradesh where it was found that loans had been advanced for milch animals to beneficiaries in poorly linked villages, on account of milk marketing problems incomes did not increase and loan repayments were endangered.

3.22 In the case of sheep and goats, however, these conditions do not hold; yet beneficiaries are found to be concentrated in similar villages. Indeed, in their case, sheep units need adequate grazing land which is often not found near well linked roadside villages. Interior villages are more likely to have such lands in their vicinity. A usual requirement for beneficiaries of sheep unit loans is for them to be members of Sheep Breeders Cooperative Societies. This requirement helps in monitoring, follow up action, health cover as well as recovery of loans, but is some times not enforced.

3.23 The experience of these livestock schemes in terms of ultimate income generation for the beneficiaries is a very mixed one. It has been found that Banks have been very keen to push these schemes since they form a very tangible

device for the distribution of income generating assets to the poor. In the cases where problems occur, which appear to form a large proportion among the beneficiaries in the districts surveyed, they arise owing to a variety of reasons.

3.24 The *modus operandi* for schemes in which animals are distributed is that after sanction of a loan, a purchase committee is formed for the purchase of the animal before it is transferred to the beneficiary. The Committee is often found to consist of 3 officers in addition to the beneficiary. There is usually a representative of the bank, a representative of the B.D.O., and a Veterinary Assistant Surgeon (VAS). The VAS is expected to certify the health of the animal, to vaccinate it, to deworm it and confirm that the animal is of the type required. Various problems arise from this system. It often takes long time for the purchase committee to assemble leading to delays for the beneficiary. Further, with the usual problems of bunching up of loans, specially towards the end of the financial year, pressure is created in the market and prices tend to get bid up. The beneficiary then often has to pay more than the loan-cum-subsidy amounts. There appears to be a great shortage of VAS: hence it is not unusual for the VAS to be absent from the purchasing committee with the result that animals in poor health may be purchased or ordinary animal may be purchased in the guise of mixed breed high yielding ones. The studies do not quantify these kinds of malpractices. They do not appear to be too rampant except that bidding up of prices is common.

3.25 The economic of milch animals is highly dependent on their producing the requisite amount of milk. This is the area where the most problems have been observed. The high yielding crossbred varieties are less hardy and suited to local conditions than the local varieties. They are therefore more apt to catch diseases. They also need better quality and more expensive modern compound feed. In some areas as many as 80 per cent of the beneficiaries were unable to provide such feed which could cost about Rs. 3-4 per day per animal. The feeding cost thus worked out to about Rs. 1100 to Rs. 1400 per annum. If the average lactation period is about 190 days, and milk can be sold for about Rs. 1.50 per litre the break-even daily yield would be between about 4 and 5 litres. The average of scheme animals was between 5 to 6 litres hence the surplus for the beneficiary was not even adequate to pay back the loan. The SF, MF and AL beneficiaries therefore faced grave liquidity problems as a consequence of acquiring milch animals under this scheme. It should be pointed out, however, that if all the correct practices are followed crossbred cows yield anything between 8 to 15 litres per day and if insemination is done at the correct time, the lactation period can be as much as 9 months

in a year. The insemination is often not done at the right time because of poor follow-up and shortage of veterinary staff and the farmer's obvious resource constraints militate against the animals getting adequate feed. This is clearly a vicious circle since the idea of the scheme is to provide these animals to the poor in order to rise their incomes.

3.26 In the case of sheep units, the key problems appear to be shortage of adequate pasture land and a serious lack of appropriate health care. The mortality rate of sheep was found to be quite high as much as 50 per cent within a year in some places. As mentioned earlier, insurance cover is compulsory for all livestock loans. Insurance is difficult to collect, however, because of stringent claim provisions. In the event of a claim, it is common for an insurance company to require reporting of the event by telephone or telegram within 24 hours. Secondly, in the event of death, the insured has to have a post mortem examination made by a qualified veterinary surgeon. These are conditions obviously difficult to fulfil with the communications facilities being what they are. The poor farmer often has to carry the carcass as far as 20 km to a veterinary dispensary for post mortem. As a result, claims are often not made.

3.27 Plough bullocks, bullock carts, piggery and poultry were not found to figure prominently in these programmes and there is very scanty information available for the districts under review. Plough bullocks appear to be an economic proposition but their utility depends on the cropping intensity in the area for their earning potential.

3.28 In summary, animal husbandry schemes were found to be most favoured credit linked schemes with financial institutions in particular the provisions of milch animals. Various difficulties have been noted in the implementation of these schemes. Some difficulties are intrinsic in the poverty and low skill level of the beneficiaries. Other difficulties arise from poor planning and shortage of staff to give infrastructure support.

Irrigation

3.29 Irrigation schemes have formed the major component of the DPAP, as well as a significant part of the SFDA and IRDP. The intention was to devise different moisture conservation and irrigation schemes after conducting comprehensive hydrological surveys in the selected districts and blocks. The proportion of total expenditure spent on irrigation related schemes varied from 30 to 70 per cent in DPAP and 30 to 50 per cent in SFDA and IRDP. The Orissa, Madhya Pradesh and Karnataka studies give very little details information on the operation of irrigation schemes even though the

expenditure involved on the schemes are reported to be substantial. The information available from these States relates largely to the beneficiary linked schemes such as the provision of pump sets and dug wells which seem to form the major portion of irrigation schemes in these districts. The following description of irrigation schemes is therefore mainly from the information from Tamil Nadu.

3.30 The first priority in drought prone districts is therefore to strengthen and conserve existing irrigation facilities and then to devise new schemes. It appears that hydrological surveys have been carried out in the Tamil Nadu districts but not in the Orissa and Madhya Pradesh districts, while no information is available for the Karnataka districts.

3.31 As a result of an assessment of the availability of surface water, the State P. W. D. have devised various schemes for medium irrigation in Tamil Nadu. In most cases, however, delays have occurred resulting in significant cost increase. The escalation in costs has occurred partly because of delay but also because of inadequate original estimates. Some of the delays have been caused by court proceedings related to land acquisition procedures.

3.32 Minor irrigation from surface sources includes construction of new tanks, anicuts, check dams and weirs across natural streams. The potential for such works is obviously limited in areas which already have a high density of tanks such as Ramanathapuram District. Among the schemes reviewed, once again major delays were found to be the rule accompanied by cost escalation partly because of inadequate information on soil conditions and partly because of faulty and sketchy initial planning. Another reason was the location of these works in remote places which contractors found difficult to reach.

3.33 An examination of some of the works in this category of irrigation schemes revealed that they were usually done on an *ad hoc* basis rather than as result of sound planning. As a result, their utilisation was found to be very low. In addition, many schemes were found not to last; in some cases there was no trace of works implemented only 2 to 3 years earlier. In other cases, farmers have not followed up with farm level works.

3.34 One type of scheme that was found to be very successful was the provision of percolation ponds. The idea is to conserve rain water in small ponds in order to induce sub-soil percolation to recharge the ground water resources in an area.

3.35 Existing tanks are a major source of irrigation, specially in Tamil Nadu. It is estimated that there are as many as 37,000 tanks in the

State irrigating about 34 per cent of the net irrigated area. Their potential, however, is not being fully utilised because of maintenance and other problems which require investments and organisation of works in order not to lose their valuable source of irrigation. Many tanks beds, sluice entries and supply channels have become silted over the years, extensive tank bed and foreshore cultivation through encroachments have reduced supplies in the tanks, bunds are weak and therefore often breached, sluices are misplaced or damaged. The State currently has various schemes to update deficient tanks but according to one estimate, it will take 24 years at the current level of expenditure to standardise all the deficient tanks. What is needed is more organised approach in which a roster is kept for every tank and maintenance work executed on a regular basis e.g. every five years. It should be emphasised here that the problems are not merely those of resources and technical planning but also social. Many maintenance works require community acceptance and involvement. Encroachments, for example, are really a result of the population pressure on land. Work on channels which pass through fields of different farmers require a certain level of cooperation. Further, since most tanks are panchayat owned organised maintenance would clearly require community interest and sanction.

Groundwater

3.36 The Central Groundwater Board takes up surveys in different parts of the country to identify the existing groundwater availability. In the absence of surface irrigation sources and canal irrigation, groundwater is the major irrigation source in drought prone districts. Further, in the case of high yielding varieties where the timely and adequate supply of water becomes very important, water from tube wells is a highly desired source of water. In Dharmapuri District in Tamil Nadu, for example, about 65 per cent of net irrigated area uses wells as the source, about half of which are energised. In Phulbani and Sambalpur districts in Orissa the net irrigated area is only 3 and 8 per cent respectively of total cultivated area. The potential of groundwater irrigation is therefore enormous.

3.37 Under IRDP, subsidies are given to small and marginal farmers for dug wells as well as energising wells. These also have to be planned properly in relation to soil conditions, availability of groundwater as well as availability of diesel and electricity in the case of pump sets. Many cases have come to light in these surveys where bad planning has resulted in meagre or no benefits accruing despite investment in wells, for example,

- In Phulbani and Sidhi districts, many pump sets are inoperative owing to shortage of diesel. Electric pump sets

have been installed in some places in Sampalpur and Jabalpur districts. Where an electricity connection has taken almost a year to be provided.

- Because of a lack of soil investigation, some works on dug wells have encountered hard rock and therefore have had to be abandoned after considerable investment.
- In other cases, dug well have not been deep enough in order to save money with the result that they dry up quickly.

3.38 In some districts like Dharmapuri, over exploitation of groundwater has resulted in a steady decrease of the water table. A current practice aimed at controlling this over-exploitation is the denial of credit by financial institutions or denial of electric connection to people seeking new wells. Those who can afford to do the work without credit or those who can install diesel pump sets escape these restrictions: the poor then suffer while the better off are able to get more irrigation. The only way out of this problem is better management of water resources and cooperative use of well irrigation.

3.39 Community irrigation schemes have not formed part of the IRDP but have been pursued in various blocks. Where they have been organised properly, for example, in some blocks in Sambalpur district and in Sidhi district, the benefits to the community have been very high. In Ramanathapuram, however, a scheme of 100 bore wells, each with an average capacity of 12,500 gallons per hour was found to suffer from a number of problems. First was the difficulty and delay in obtaining electricity connections. Second was the failure of almost 30 per cent of trial borings because of inadequate yield or salinity arising from a lack of sound technical advice. Third were problems relating to the economics of the schemes. Because some of these wells were located within the ayacuts of tanks, farmers were not willing to pay for the well water whenever the tank water was available. The wells could therefore not pay for themselves. Fourth, was again the problem of farm works such as pipe lines and field channels and agricultural extension for information in double cropping, which were not carried out in a timely fashion. Lastly, there is also the problem of maintenance and operation of the community bore wells once they are commissioned. There is need for coordination between the operating departments and panchayat unions whose responsibility they ultimately become.

3.40 This review has dwelt on the difficulties encountered in the minor irrigation schemes as administered in the various rural development projects. The necessity for irrigation is obvious

and the success of well administered schemes are also well known. The key problems appear to be :

- (i) Lack of technical informaton
- (ii) Lack of coordinated planning
- (iii) Lack of follow up and monitoring at the farm level.

Where these problems have not occurred individual as well as community benefits from minor irrigation schemes have been substantial.

Soil Conservation and other Agricultural Schemes

Soil Conservation

3.41 Soil conservation measures were carried out mainly in the DPAP districts. About 14 per cent of the DPAP expenditures in Ramanathapuram district were on soil conservation, about 10 per cent in Dharmapuri district, about 16 per cent in Phulbani district in Orissa but almost none in Sidhi district in Madhya Pradesh. Soil conservation measures are carried out by the Agricultural Engineering Department which should have an Executive Engineer in each DPAP district or a soil conservation officer as in Orissa.

3.42 Very little information is available on the operation of soil conservation measures. Once again, what information there is, comes from the Tamil Nadu study. Even there it was found that no evaluation of the efficacy of soil conservation measures has been carried out. The general tendency had been to undertake works on demand in scattered plots. Work was often done in the most accessible plots so that the executive department could reach its targets more easily. Furthermore, since soil conservation activities require the consent of the farmer, naturally work were taken up in those areas where it was easier to obtain consent. It was found that in many cases this consent was easily obtained for works in waste land and fallow land. It was observed, however, that the situation has improved considerably now and work is being carried out in a more systematic manner in 1000 acre watersheds. Sometimes, however, this procedure is applied too rigidly and needy formers who do not fall within these watersheds are not assisted even when they request assistance.

3.43 The general system of assistance in soil conservation works is that a 25 per cent subsidy is given along with a 75 per cent loan which is available to all farmers. Small and marginal farmers get no additional assistance. The only difference is that funds for them come from DPAP while those for others have to come from State Plan funds. If the cost is over Rs. 200 per acre permission has to be obtained from Directorate of Agriculture which usually leads to delays in implementation. The maintenance for the first

two years is done by the executing department and a sum of 2.5 per cent of original cost of works is allotted for this purpose. Later, maintenance is the responsibility of the beneficiaries.

3.44 The most common soil conservation works are contour bunding and land levelling. Farmers seem to be more keen on land levelling assistance. Maintenance of contour bunding works is generally found to be poor. Other works which are carried out are graded bunding, deep ploughing, land shaping and gully control in dry lands and field drains, lining of field channels, laying of pipelines in irrigated lands. Contour bunds were often found not to last in the face of floods. In the case of schemes where major land shaping, deep ploughing etc. are taken up they are supplemented by the provision of inputs to help the farmer utilise the new fields better. Where these works have been carried out properly and supplemented with input provisions and subsidies, benefits to farmers have been quite substantial. It remains to be seen, however, how long these benefits last and especially after the subsidies are withdrawn.

Other Agricultural Schemes

3.45 The promotion of agricultural production and therefore agricultural incomes requires a number of other activities in addition to the irrigation and soil conservation measures that have been reviewed earlier. Indeed, the full benefits of the above schemes can only be derived if adequate changes can be induced to occur in various agricultural practices in response to changed conditions. Increase in crop output occur basically because of increases in area sown or increases in yields per unit area. In addition to new areas being brought under cultivation because of soil improvement measures, the provision of irrigation makes possible increases in cropping intensity (or gross cropping area). Extension efforts and increased availability of modern inputs are necessary for such changes to take place. Extension efforts can also induce changes in cropping patterns to shift production to more remunerative crops resulting in higher farm incomes. Other measures that can improve farm incomes include better marketing efforts specially in the case of perishables like fruits and vegetables. The aim of IRDP is to integrate all these measures in the promotion of agricultural and rural development.

3.46 With this background, the direct agricultural schemes in all programmes (DPAP, SFDA and IRDP) have consisted mainly of extension efforts, the provision of input subsidies and soil classification services. In the Tamil Nadu districts such schemes were found to form about 4—7 per cent of total expenditure in DPAP and about 15 to 20 per cent in IRDP. In Orissa, expendi-

ture in Sambalpur in agricultural programmes was negligible but in Phulbani district it was about 15 per cent of DPAP and about 8 per cent of IRDP. In Madhya Pradesh such expenditure were found to be 3 per cent of IRDP in Jabalpur and 15 per cent of DPAP in Sidhi district. For Karnataka districts the proportion is about 20 per cent in SFDA in Tumkur district. Clubbed with irrigation and soil conservation measures, the expenditure in both SFDA and DPAP in Tumkur and Gulbarga come to about a third of total expenditure. In terms of number of people covered these schemes account for a large proportion of the beneficiaries. These are, however, somewhat illusory since the number of direct beneficiaries of inputs supplied for demonstration plots and of participants in training courses is not very high.

Farmers Training

3.47 Two kinds of strategies are employed in the training of farmers. At the block level short duration (3 days) courses are organised for which the participants are selected by the Gram Sewaks or VLWs. At the village level discussion groups of about 20 farmers each are organised by a convenor who is himself trained at block headquarters. The exact pattern varies from state to state but these are the salient features.

3.48 It appears that the discussion groups are more effective than the block level training sessions. In Tamil Nadu it was felt that at least 50 per cent of these groups were effective. Convenors themselves are given refresher courses about once every two years but do not receive any honoraria for their services. These groups can be improved by more extensive distribution of instructional literature to the convenors as well as making available radio sets for listening to farmers' programmes. It was found in Tamil Nadu that when discussion groups were provided with free inland letters to communicate with the Farmers Training Centre and All India Radio in order to clarify doubts the response was quite substantial. The convenors can be helped further by the provision of small honoraria and more frequent refresher courses.

3.49 The experience with block level training courses was not found to be very successful. The main problem appears to be in the selection of trainees. The Gram Sewak typically meets his targets by exhorting villagers indiscriminately to attend these courses. Lists are supposed to be sent to the Farmers' Training Centre much in advance so that they can be scrutinised for the suitability of participants. This is often not done or the lists are sent very late. Further, many individuals go mainly to collect the Rs. 5 daily allowance that is given. There is inadequate follow up to these courses for the purpose of

assessing the usefulness and local applicability of what is taught. A common complaint among farmers is that the techniques that are taught are too expensive. Others feel that the training is too short in duration.

3.50 These courses can be improved in their effectiveness by making the training more broad based by including instruction on soil conservation, water management, animal husbandry, afforestation and horticulture. Follow-up visits on a sample basis can help in identifying the constraints in the adoption of the techniques that are taught. It also appears that the relatively larger farmers in the targets group attend these courses more frequently. More efforts should be made to include the smaller farmers.

Demonstration Plots

3.51 Another strategy used in the extension effort is the organisation of demonstration plots. These demonstrations are done in compact blocks. The demonstrations attempt to promote new aspects of farming such as high yielding seed varieties, plant protection, cultural practices, etc. Inputs such as seed, fertiliser, and pesticides are provided as subsidies to the farmers on whose plots the demonstrations are done. It was found that financial targets are usually achieved in this programme.

3.52 The physical targets in terms of the number and spread of plots were found to be excessive in relation to the technical manpower available. Further, demonstrations were also spread thinly in terms of the number of crops attempted. The success of the demonstrations depend on the timely supply of inputs as well as on the quality of the inputs. A common complaint voiced by beneficiaries in different districts was that the supply of inputs was often delayed and that when they were given they frequently were of poor quality. These problems seem to occur in as many as 30 to 50 per cent of cases. For reasons of convenience of officials in terms of accessibility, a large number of plots are found to be located on roadside plots which are too far from the centre of village farm lands. Their demonstration effects therefore get diluted.

3.53 In the study of Tamil Nadu districts it was felt that "shortcoming such as these are almost endemic to any large scale target based programme where the technical advice comes from the Agriculture Department and field level implementation is the responsibility of the multi-purpose Gram Sewak. A smaller, well planned, closely coordinate, quality-conscious programme may be much more worthwhile than the present one which aims at too wide a coverage in terms of number of plots and number of crop varieties".

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Soil Testing and Classification

3.54 The third agricultural scheme employed is soil testing and classification of farmers' fields. The idea is to classify the soil on a scientific basis in order to determine the deficiency in nutrients, N, P, or K. The farmers can then be advised on the appropriate amount and mix of fertilizer that should be used in their fields in order to increase output on a cost effective basis. In addition, soil surveys which analyse soil characteristics such as depth, texture, permeability, alkalinity, etc., can form the basis for cropping pattern recommendations and for taking up appropriate soil amelioration and protective measures. This programme therefore has great potential benefits if carried out properly. The soil classification in farmers fields is done by stationary as well as mobile soil testing laboratories.

3.55 Soil samples are supposed to be collected by the Gram Sewak in a systematic manner and sent to the laboratories. He is also responsible for transmitting the results back to the farmers. Random samples are to be taken from 10 to 15 spots in about an acre and from about a depth of 15 cm. They are then to be homogenised and sent for testing. Records are to be kept of the fields which get sampled so that they do not get repeated. In many cases it was found that these guidelines are not followed and the Gram Sewak merely fulfills his quantitative targets by picking up soil from "all over the village". Delays occur in sending the samples as well as in the eventual transmission of results, such that sometimes results are given out after the cultivation season. The results obtained from the mobile testing vans are found to be much better since they do not suffer from many of these problems.

3.56 A revision of the present pattern has been suggested by the Tamil Nadu study on the following lines. The Coimbatore Soil Classification and Land Use Organisation has completed a soil reconnaissance survey for some districts in the state. These surveys can be supplemented in each district by village level soil fertility surveys. A village soil map can then be prepared and displayed in the village, along with prescriptions for fertilizer use. Resurveys can be done every 5 years. Individuals could still make use of the mobile testing vans as well as the stationary district laboratory for particular problems. Such a village-wise approach could eventually turn out to be cheaper than the current target based approach.

Fishries

3.57 Fisheries have not figured prominently in the DPAP districts that were studied. There were negligible expenditure under this programme in the Madhya Pradesh, Orissa and Karnataka districts. In Tamil Nadu also the expenditures

were small but information is available on the workings of the programme. In Ramanathapuram district DPAP funds have mainly financed subsidies for the sale of fibre glass boats and wooden vallams. In Dharmapuri district, they have been used for water conservation, percolation tanks and financing of nylon twine for fish nets both of which have helped the specialised inland fisheries promotion funded by the Fish Farmers' Development Agency (FFDA). Although these programmes have been small, a somewhat detailed review is given below illustrate problems as well as successes in the promotion of fisheries.

3.58 The programme in Ramanathapuram has concentrated on measures related to the catching of marine prawns. This has been done in the context of declining marine catches and depressed prices of prawns. An additional problem is that Sri Lanka has alleged over-exploitation and encroachment in Sri Lanka waters. At present the main scheme is geared to helping in the finance of fibre glass boats. The idea is to help fishermen with no assets to acquire a fibre glass boat. It was found, however, that fibre glass boats are substantially more expensive to both buy and maintain as compared with the indigenous "Tondi Vallam" boats without leading to a corresponding increase in productivity. Further, they provide less employment as well. Under the schemes, fisherman has to provide Rs. 500 as deposit when he is given a fibre glass boat. A fisherman with no assets usually has to borrow this sum from the local village prawn agent and therefore gets even more indebted to the person the boat is supposed to liberate him from.

3.59 The Fish Farmers' Development Agency (FFDA) has operated in a relatively innovative manner in Dharmapuri district. The FFDA helps with finance for both capital as well as assistance in the negotiation with banks for the purpose of obtaining loans.

3.60 The FFDA is headed by a Chief Executive Officer on loan from the Department of Fisheries. The aim of the FFDA has been to promote the use of existing tanks and ponds for pisciculture and to train fish farmers to use these in a productive manner. The accent has been to select farmers from the "less affluent" sections of the community for training and later installation as fish farmers connected with specific ponds. The first task of the FFDA was to identify appropriate tanks and ponds. Official inquiries with tehsildars drew a blank. Hence the FFDA Officials then resorted to personal visit to the various panchayats and inspected the tanks in the area. The local people were found to be the best informed. Once the tanks were identified the next step was to identify the fish farmers. Younger people from Scheduled Castes/Tribes and from fishing communities were preferred. The training

lasts about 15 days during which time they learn modern methods of fish breeding, overall nursery and pond management and harvesting of fish through visits to field stations.

3.61 On return from the training the trainees are assigned to tanks given on lease to them by the panchayat or PWD to begin fish farming usually for periods of 10 to 15 years. The tanks are first cleared of large obstructions, deepened, weeded etc. to be made ready for pisciculture. Various hydro-biological tests are then conducted to determine the suitability of the tanks for fish stocking and the measures necessary for improving them. The tanks are then stocked with fingerlings which are supplied to the farmers with 25 per cent subsidy. The farmer is then expected to ensure that the tank is regularly supplied with feed and inputs. FFDA staff conduct occasional visits to check the feed levels and also to do further hydro-biological tests. Harvesting usually takes place 4-5 months after stocking; this has to be done in the presence of FFDA officials.

3.62 In a space of 18 months considerable progress was made in this scheme by the FFDA although financial outlays were only about 7 per cent of the budgeted provision. During this period about 90 trainees were trained, about 200,000 fingerlings were stocked, about 220 hectares of tanks stocked and fish worth Rs. 55,000 harvested.

3.63 It was found that the yield was considerably higher from small tanks. The yield per hectare from small tanks of less than 5 hectares was 250 kg. per hectare while in the bigger tanks it was about 60 kg/hectare. Although this was partly due to lower stocking densities in the larger tanks it was felt that it was also because of management and policing difficulties which are more intractable for larger tanks. Because of the drying up of tanks due to summer heat all tanks had to be harvested simultaneously leading to a glut in local markets.

3.64 Although this programme has been relatively small in scope (about Rs. 75,000 in subsidies and loans), it illustrates well the potential of schemes which use existing under utilised resources, both human as well as physical, in an organised manner.

Food for Work Programme

3.65 The Food for Work Programme (FFW) was launched in India in April, 1977. The main objectives of the programme were:—

- (i) to generate additional gainful employment to a large number of unemployed and under employed persons in the rural areas particularly in seasons when employment is not available to them, and consequently to enhance their incomes and nutritional levels.

- (ii) to create durable community assets and strengthen rural infrastructure to facilitate development activities which will result in higher production and better living standards in rural areas.
- (iii) to utilise surplus food grains. (A minimum of 50 per cent of the wages are required to be paid in food grains).

3.66 The programme was not taken up in Tamil Nadu until 1979 since earlier only wheat was being provided under FFW. In Karnataka also, the FFW was introduced in 1979. It does not appear to have been operating in the districts studied in Orissa and Madhya Pradesh.

3.67 The Union Ministry of Rural Reconstruction is the coordinating agency which formulates guidelines to be followed by the State Governments for planning, implementing and monitoring the programme. There is a steering committee at the state level which consists of the heads of all the concerned State Government departments, Food Corporation of India officials and a representative of Ministry of Rural Reconstruction. At the district level, the Steering Committee is headed by the Collector (Deputy Commissioner). In Tamil Nadu, the scheme is administered through the Rural Development and Local Administration Department. At the Panchayat Union level the administering Committee consists of the Divisional Development Officer (DDO), Panchayat Union Commissioner, and Union Engineer. In Karnataka, the schemes are administered through the BDO and village panchayats.

3.68 The FFW programme was envisaged to be a programme which would provide substantial employment opportunities to the rural poor in the lean season. The work was to contribute to the creation of durable community assets and to be paid for through the payment of foodgrains to the extent of at least 50 per cent. Foodgrains fit for human consumption were to be supplied. Members of elected bodies such as panchayat unions were expected to participate in the decision making concerning the selection of projects. It was also expected that middle men such as contractors would have no role in this programme.

3.69 Since the programme started in both Tamil Nadu and Karnataka as late as 1979, only a partial evaluation is possible and the following review is therefore necessarily incomplete. Once again, more information is available from Tamil Nadu.

3.70 Despite the late start a considerable volume of foodgrains were distributed in Ramanathapuram and Dharmapuri Districts through the FFW. In Ramanathapuram District, an average of about 200 tonnes of foodgrains were

utilised per panchayat union and about 130 tonnes per panchayat union in Dharmapuri District. Hence the panchayat union funds were augmented by about Rs. 300,000 and Rs. 200,000 on average, in Ramanathapuram and Dharmapuri Districts respectively. A total of about 65000 tonnes of foodgrains were utilised in 1979-80 (upto February 29, 1980) in Ramanathapuram district and about 2100 tonnes in Dharmapuri. The respective value of works was Rs. 110 lakhs and Rs. 38 lakhs respectively. In Gulbarga and Tumkur districts in Karnataka, the programme had just started only Rs. 40,000 worth of grain having been used in Gulbarga district. While the sums mentioned above are substantial in Tamil Nadu in relation to the normal resources of the panchayat unions, the amount of employment generated was rather small relative to the estimated need. It was estimated in the two Tamil Nadu districts that in the lean season which stretches from about January to July, agricultural labour is largely unemployed for 125 to 150 days approximately. In comparison, even for the persons employed under FFW in these two districts, the average number of mandays of employment per person was about 4.6 in Ramanathapuram and 2.6 in Dharmapuri. In the whole of Tamil Nadu about 23 lakhs people were employed under FFW at an average of about 6 days each.

3.71 The most popular type work undertaken under the FFW programme has been construction and maintenance of roads. In addition, in Ramanathapuram district, deepening of irrigation tanks and supply channels and some maintenance of public buildings such as panchayat school buildings, were also taken up. In Dharmapuri district and in Gulbarga district road construction and maintenance was by far the single largest category. In Tumkur district, tank construction and maintenance as well as school building repairs were also taken up. It was found in the Tamil Nadu districts that there was considerable variability in FFW allotments between divisions and panchayat unions within the same district. It was also found that the projects undertaken were characteristically very small: about Rs. 2300 was spent per project in Ramanathapuram and about Rs. 1300 in Dharmapuri. It is obviously difficult to create durable assets of any significance with such small sums. Further, when works are so scattered and small in nature proper supervision becomes impossible.

3.72 A major problem in the execution of works was the irregularity and shortfall in the supply of grain. The value of the total quantity of foodgrains provided fell considerably short of the total value of works. This shortfall ranged from 11 to 15 per cent for the two Tamil Nadu districts and about 18 per cent for the State as a whole. The irregularities in supply meant that works could not be planned properly. It also

meant that people are often paid much after the work was done. It has been alleged in some cases that some people were never paid for work done. Yet another effect of the shortfalls was that it induced the employment of contractors who could make interim payments from their own resources until the grain arrived. The employment of contractors meant that they took their own share from the allotments which could be as much as 15 to 20 per cent of the total—thus diverting resources from those who needed them most. Another major problem with the programme that induced the use of contractors was that the rice was of extremely low quality. The Panchayat Unions therefore found it convenient to let contractors face the dissatisfaction caused. It appears that this was not an isolated problem but one that was common to all villages visited by the Tamil Nadu Study team which studies: "The stocks we saw varied from the very bad—yellow and sometimes broken grained rice in lumps and with worms, insects, rat droppings, grit, fluff and stones—to yellow grained rice with stones that stank when boiled." Similar problems concerning quality of rice were also found in Gulbarga district.

3.73 The FFW programme was supposed to supplement work in the lean season and therefore to stabilise wages as well. It was found in the Tamil Nadu districts that works under FFW were concentrated in the peak season from August to January. One of the reasons was that that was the time when the grains were supplied. Thus there was little effect of the programme on wages or employment in the lean season. Another consequence was that works were often interrupted by rains and the completed work had often to be re-done on account of the rains.

3.74 In addition to the employment and nutrition aims of the programme it was to be used to create durable community assets. The creation of durable community assets requires proper block level or village level planning. This could not be done because of the irregularity in foodgrain supplies: in any case there was no stability in the availability of foodgrains from year to year. Secondly, at that time, there was no provision for the material component of the works. As a result, in the case of roads, largely *kachcha* roads were constructed often without culverts and bridges because of lack of material. On work undertaken on tanks and supply channels work done was less durable because of an exclusive reliance on earth work and manual labour.

3.75 The FFW programme was started with laudable intentions of utilising the surplus grain food stocks to provide employment and nutrition to labour in the lean season and to create durable community assets in the bargain. For such

a programme to be successful proper and detailed planning was necessary at all levels and especially at the village and block levels. The creation of durable assets required coordination with other agricultural and rural development programmes. Such planning can only be done if the programme is of a regular nature and there is some stability in year to year operations. Given the irregularity in supplies and the lack of planning, it was found in these studies that the programme was not successful in the achievement of any of its objectives: provision of employment and nutrition, stabilisation of wages in the lean seasons and creation of durable assets. The three factors: inadequate and irregular supply of rice, its consistently poor quality and the provision of work during the agricultural seasons, all combined to severely hamper the implementation of the FFW programme. Furthermore, "they were also, in the eyes of the agricultural workers who were interviewed, a measure of the callousness and lack of concern of the Government in implementing a programme that it had announced with so much fanfare", according to the Tamil Nadu study team.

An overview

3.76 The sector-wise review of the various special programmes brings out certain general features which are worth noting.

3.77 Many of the programmes have not been as successful as expected because of the lack of integrated planning of related facilities and coordination between the different agencies involved. The development of animal husbandry will require coordinated and simultaneous programmes for cattle development establishment of chilling plants, provision of milk roads, arrangements for marketing, etc. In the case of irrigation besides the provision of water, arrangements have to be made for on farm development, provision of technical support, credit, etc. These examples could be multiplied. The evaluation studies seem to indicate that existing arrangements for coordination and integrated planning at the local level are not very effective. Improvements in arrangements for local planning and coordination are essential if the special programmes are to succeed.

3.78 One important aspect of coordination is the link between beneficiary oriented schemes and area development measures. The evaluations bring out the importance of infrastructure in ensuring that beneficiaries can take full advantage of the schemes directed at them. Deficiencies in infrastructure arises not merely from the lack of financial resources but also from shortage of personnel. Hence there is a vital need to link up beneficiary oriented schemes with area development measures and the provision of infrastructure.

3.79 There have been many deficiencies in the support systems. The correct technical advice has often not been given. Critical elements like marketing support have been missing in some cases. Arrangements for technology transfer like farmer training have not been very effective. The special programme involve important changes in the technology of production and may well require new marketing or credit arrangements. They cannot succeed unless the support system for technical extension, marketing, raw material supplies and credit are effective.

3.80 The critical importance of infrastructure and support services is such that many programmes like animal husbandry and soil conservation have concentrated in easily accessible areas. This means that the objective of overall area development is Jeopardised and many poor households, in the interior, fail to benefit from the programmes on to the interior are necessary if the special programmes are to achieve their purpose.

3.81 There is a general tendency in plan programmes to concentrate on new investments

and not pay sufficient attention to the maintenance of past investments. This feature has been brought out by the evaluations of the special programmes also. It would be useful if the repair of deteriorated facilities and the maintenance of existing assets become an integral part of the planning process. It may be possible to use the Food For Work Programme for this purpose.

3.82 The beneficiary oriented programmes seem to have had some impact. The level of leakage to non-eligible households seems to be less than what is commonly supposed. However, much of the subsidy amount is absorbed by legal and other preliminary expenses. The procedures which the beneficiary have to follow to obtain assistance are very complex and need some simplification. The assumed economies of the schemes meant for beneficiaries participate also need to be cross-checked and reviewed from time to time. In some cases the extent of benefit is far less than what the calculations suggest.

4. CONCEPT OF BACKWARDNESS

In our country, a very large number of people believe that the area they live and work in is, in some more or less general way "economically backward". Many of them also feel that their requirements have been neglected in the processes of planning. This belief has found expression in the political system and manifests itself in a large number of claims for special treatment put forward by official and non-official organisations. Within the planning system, pleas for taking measure to tackle the problems of backward areas are common in the discussions at the National Development Council, the Planning Commission and the debate in Parliament. Thus, there is widespread public concern about the problem of backward area development.

4.2 There are many reasons for this and one of these is paradoxically, the quickening of the pace of development in the post-independence era. In a stagnant or slowly growing society, regional inequalities inherited from the past may continue but are unlikely to worsen in the ordinary course. Expectations of rapid advancement are not aroused and there is no clear vision of prosperity and plenty against which people can compare their own condition. A quickening in the rate of growth can change all this. As income and production grow expectations rise. The more advanced or more rapidly growing areas of the country set standards of production, consumption and economic diversification which the other areas wish to attain. Inequalities which may have been acceptable in a stagnant society now seem invidious and unacceptable because people can see that the prevailing order can be changed. Thus perceptions of backwardness are, to a large extent, a consequence of development.

4.3 The comparison with others can become all pervasive. The people in each area will compare themselves with those in a more advanced area and consider themselves to be backward relative to some area or the other. There are no absolute standards of 'backwardness' as there are no such standards for 'development'. Hence the concept is a relative one and in the ranking of areas, as perceived by them, all but the ones at the top are seen to be 'relatively backward'. In fact, with the internationalisation of developmental issues, the comparison is often with other countries and all areas may consider themselves to be backward, in an international context.

4.4 People's consciousness of the concept of 'backwardness' has been reinforced by the many

financial arrangements and schemes that give special treatment to 'backward' areas. Each of these arrangements defines backwardness for its purpose in a particular way. Generally the definitions are so calibrated selectively so as to limit the geographical coverage of the schemes is suitably limited. Thus in the arrangements for fiscal transfers between the Centre and the States, backwardness has been defined in terms of the State income being below the national average. Similarly in the present scheme for concessional finance for industry, industrial backwardness is defined relative to the state average. Since the perception of relative backwardness has become so all pervasive, areas which are excluded in any arrangement feel aggrieved. Hence pressures arise to alter the definitions so as to cover the excluded areas.

The Concept of Backwardness

4.5 The root of the problem lies in the lack of clarity on the concept of backwardness and its relevance for the processes of planned development. In a multi-tier democracy it is also necessary that there should be some degree of consensus behind the specific definitions used to make the concept operational. What is the concept of 'backwardness' appropriate to the process of planned development? The draft Report of the Chakravarty Committee on Backward Areas made some relevant observations on this matter. The Draft Report states: "The purpose of this Committee is to provide an approach towards the formulation of plans for backward areas where backwardness refers not necessarily to poverty but to factors which underlie such poverty" (Draft Report of the Chakravarty Committee on Backward Areas, para 2.3). Later in the report when dealing with the appropriate development strategy for backward areas the Chakravarty Committee emphasised the need to identify the required "directional departures from national strategies".

4.6 The National Committee would agree that what is required is the identification of types of backwardness that are amenable to planned development. The Draft Report of the Chakravarty Committee does have this emphasis. However, there are certain other important features of the concept of backwardness which need to be made more clear.

4.7 The planning process takes care of themselves that are required for the purposes of general economic development. Within this

framework backward areas need special handling in terms of financial and administrative arrangements and institutional support. These arrangements and the support have to be additional to the general structure. In fact, it is this additionality of special additives to take care of problem areas which creates the urge to add further areas to the list. The important point, however, is that the backward area must have a potential for development and there must be some reason for supposing that by detailed planning, administrative and financial support the productivity of the area can be raised. This presumes that the area has potential for growth which at present has not been dealt with satisfactorily. Where there is no potential for growth, the answer, as already indicated in past plans, lies in out-migration. Thus, for purposes of planning, the areas identified as backward must have three key characteristics :—

- (a) They must have potential for development;
- (b) There must be some inhibiting factor which prevents this potential from being realised; and
- (c) There must be a need for special programmes to remove or mitigate the inhibiting factor and realise the full potential for development.

In summary, the concept of backwardness that the National Committee considers relevant for planned development is that an area is backward if it is in need of special measures in order to utilise its development potential to the full. In this context special measures are not merely a question of finance but will involve directional departures or changes in the complex of policies, programmes, technologies and institutional arrangements in the various sectors of development.

Basis for Identification

4.8 The concept of backwardness outlined in the previous paragraph has to be operationalised in a manner that is least open to disputation and most likely to attract a consensus of agreement. As the Committee sees it, there are broadly two ways of operationalising the concept. The first is to rely on some overall index for ranking areas and treat all areas below some cut off point as backward. The second is to identify problem areas in different categories by specifying the constraints on development that can only be mitigated by special measures. With both approaches it is necessary to specify the geographical unit relevant for purposes of demarcation. In what follows we deal first with the specification of the appropriate geographical unit and then with the two alternative approaches to identification.

Unit of Identification

4.9 The concept of backwardness suggested earlier focusses attention on the need for special measures to realise the potential for development. This requires that the unit should be small enough to ensure a certain homogeneity of condition so that a further differentiation of approach within the area is not necessary. At the same time the unit must be large enough to be suitable for local planning. The special measures identified for each area would have to be implemented mainly by official agencies. Hence the unit chosen must fit into the framework of development administration. A further factor that has to be taken into account is the availability of quantitative data on the indicators chosen for the purposes of identification.

4.10 The district and the block are both suitable from the administrative point of view as they are both recognised levels in the hierarchy of development administration. From the point of view of data availability the position is somewhat better at the district level than at the block level. However, much of the data that is at present being compiled at district level from census enquiries or administrative control mechanisms can also be compiled and, in many cases, is being compiled at block level. Block level development administration has been around for a long time and the idea of block level planning has found much favour in recent years. Hence the availability of data at block level is already improving. In any case improvements in the availability of data at block level are necessary for the purposes of local planning.

4.11 The crucial consideration in choosing between the district and the block as a unit is the need for some physical and socio-economic homogeneity within the base unit. The district in India, is on average, a large unit. There is also a great deal of variation in the size of districts. There are some districts which are very large in size (Bastar with an area of about 39 thousand sq. kms.) or with a very large population (e.g., 24 Parganas with a population of 8.5 million) or with a variety of physical conditions (e.g. Ratnagiri which has coastal plain as well as hill areas). The potential for development and the measures required to realise this potential will tend to vary greatly within a district. Hence, if the district is chosen as the unit for demarcation, there is danger that the benefit of special measures may accrue largely to the more developed parts of the districts. The development block as a unit is more uniform in size and, because it is smaller than the district, more homogeneous in physical and socio-economic conditions. The National Committee would recommend that the primary unit for the identification of backward areas should be the development block.

Index-based approach

4.12 The index based approach relies on an overall statistical measure of backwardness which may be used to rank districts/blocks by degree of development. A cut-off point is specified and all districts/blocks below the cut off point in the ranking are considered backward. Since no single available indicator at district or block level is considered adequate by itself for this purpose, the statistical measure is built from a multiplicity of indicators. Since a number of indicators are used there has to be a procedure for weighting the separate indicators to aggregate them into a single measure. Thus the index based approach require specification of the following:—

- (i) A set of basic indicators;
- (ii) A procedure for weighting or aggregating so that these indicators can be reduced to a single measure; and
- (iii) A cut-off point below which areas are to be considered backward.

4.13 Many exercises based on the index approach to the identification of backward areas have been attempted. At the national level the most notable is the attempt made in the draft report of the Chakravarty Committee on Backward Areas which is reported in Annexure 4.1 to this Chapter. Several States have attempted index based exercises to identify backward districts/blocks for purposes of development planning.

4.14 The principal problem with the index based approach is that there is a great deal of arbitrariness at each one of the three stages listed in para 4.12 above. This arbitrariness leaves much scope for disputation. An excluded area can argue for a different set of basic indicators or weighting systems or cut-off points which would be favourable from its point of view. Hence, even if the approach is accepted as valid, there may be a great deal of difficulty in reaching any agreement on the matter between the various participants in the planning process.

4.15 The set of basic indicators chosen for the construction of the index generally reflects the availability of data. There is rarely any prior consideration of what ought to be measured. Indicators are included because they are available. Critical factors are excluded because the relevant data are not available. There is a certain tendency to rely heavily on data from the population census because they are readily available at any required level of disaggregation. When a wider and more representative set of indicators is used, as in the draft report of the Chakravarty Committee, the analysis has to be done at district level since compiled data for lower levels are not readily available.

4.16 From the point of view of the Committee there is a further difficulty in the type of indicators chosen. Generally these indicators reflect the result of a development process rather than the causal factors which led to the present situation. The Committee has suggested a concept of backwardness which requires the identification of areas in need of special measures to alleviate the constraints on development. It is not all clear that the types of socio-economic variables used in the index-based exercises reflect this orientation. For instance in the indicators used in the draft report of the Chakravarty Committee the only ones which reflect constraints of a sort are the length of surfaced roads and the rate of literacy. Even these are not basic constraints in a strict sense and critical factors like rainfall, topography etc. do not appear in the list of indicators in any direct fashion.

4.17 The aggregation of a variety of indicators into a single measure poses many difficulties. Since the choice of indicators does not necessarily reflect a prior analysis of relevant factors, there is as yet not acceptable method of aggregation. In many cases all the indicators are given equal weight on the principle of ignorance. With this approach some variable which is over-represented in the set because data are easily available (i.e. literacy) automatically gets a higher weight. In some cases this problem is avoided by giving arbitrary weights to each indicator on the basis of some subjective judgment on the importance of the factors. If there can be some agreement on these judgments the method is workable provided of course that the indicators chosen are relevant.

4.18 A third method that has found favour lately is the method of principal component analysis. Roughly speaking, the method of principal component analysis can be used to reduce on set of indicators to a smaller number of indicators by taking into account the inter-correlation amongst the indicators in the original set. Each of the new and smaller set of indicators can be expressed as a weighted sum of the original indicators, the weights being derived from various arithmetical operations on the correlation matrix. Each of the new set of indicators 'explains' some proportion of the variance in the original data. The method is useful if any one of the new set of indicators (a) explains a substantial proportion of the variance, and (b) has the expected signs on the weights attached to each of the original indicators. There is no guarantee that this will always be the case. For instance, in the exercise reported in the draft report of the Chakravarty Committee the indicator labelled 'backwardness' has a positive (but small) weight attached to the value of food-grains output per capita and to the length of surfaced roads per unit area. The positive sign

on these two variables is clearly perverse since one cannot argue that the higher the per capita foodgrain output and the more dense the road network the more backward is the area. Thus at the present stage we do not find the method useful and the belief that the principal component method solves the weighting problem is not well-founded.

4.19 The final element in the index based approach is the specification of a cut-off point below which an area is to be deemed as backward. Generally the medium or average value of the index is taken as the cut-off point. There is no sanctity in this assumption. The draft report of the Chakravarty Committee has used a more promising approach in one case. They have identified break-points or gaps in the scores as one proceeds down the ranking and grouped districts into four categories. This four folds classification has the further advantage that it avoids the simplistic dichotomy of area into backward and advanced. However, there is still a great deal of arbitrariness in deciding at which of the many break-points one should place the cut-off level for identifying areas in need of special measures.

4.20 The index-based approach does not classify districts into problem categories and in fact further analysis is required in order to do this. All the districts/areas below the cut-off point do not necessarily have the same problem. A multiple classification of the sort referred to in the previous paragraph may be somewhat better. But here too the problem may not be the same within the each group. There is also no indication that those below the cut-off are all developable and have the requisite potential.

4.21 It could be argued that the problems associated with the index based approach can be avoided by using simple measures like the percentage of population below the poverty line or the rate of unemployment or the value of domestic product per capita in the area. However, there are certain difficulties in accepting this argument.

4.22 Poverty and unemployment may be manifestations of backwardness but are certainly not causative factors. There are areas which have to be treated as backward even though they do not show a high poverty percentage or rate of unemployment. A typical example would be the hill areas of the Himalayas which, probably on account of outmigration and remittance incomes, show fairly high levels of per capita consumption and low levels of unemployment. Nevertheless the Himalayan hill areas are in need of special measures to realise their full potential for development and must, in our view, be treated as backward. Hence, poverty and unemployment are not by themselves indicators of backwardness in the sense in which this term has been understood by this Committee.

4.23 With regard to estimates of domestic product at district/block level, some rudimentary calculations are possible. However, the usefulness of such income estimates is open to question. The income generated in an area is not the same as the income accruing. At a block or district level the difference between these two concepts can be quite substantial. For instance a block or district in which a very large industrial enterprise is situated will show a high level of income from manufacturing. But a substantial proportion of this income may accrue to people outside the block/district in the form of profits. Similarly a block/district with a large forest area will show a high level of income from forestry. Here too the bulk of this income may accrue to the State Government rather than to people within the area. Apart from this, there are also some difficulties in defining clearly the income generated within a district from activities like rail transport, power distribution, etc. The Committee has seen one exercise giving estimates of district-level income for the U.P. districts. These estimates put almost all the districts of the hill areas and of Bundelkhand above the State average while Lucknow district falls below the State average. Clearly the estimates, even if they are correct, have failed to identify backward areas in need of special measures to realise their potential for development.

4.24 It has been suggested that instead of using an overall index it may be easier to define sectoral indices to identify backwardness with respect to specific sectors of development e.g. agricultural backwardness, industrial backwardness, educational backwardness etc. The Committee feels that such sectoral indicators would also have to face the problem of identifying relevant indicators, aggregating them and defining cut-off points unless there happens to be some single indicator and a well-defined norm on which there is a fair measure of agreement. Moreover, it is not clear that these sectoral indicators will help to identify areas in which a wide range of special measures or initiatives will be required for realising the development potential which is really the concept of backward areas the Committee has suggested above. Such indices may be of use in the monitoring of regional inequalities at the sectoral level. In particular the concept of industrial backwardness may have some validity. But as a general answer to the problem of identifying backward areas, the sectoral index approach is not very promising.

4.25 The National Committee has considered carefully the possibility of using an overall index to identify backward areas in the sense in which the concept of backwardness has been defined earlier in para 4.7. The Committee had the advantage of examining several studies in this field. The Committee feels that the present position with regard to data availability and the

development of methodologies is such that an index based approach to the identification of backward area cannot be recommended. Such an approach will not be able to take into account all the relevant factors in an objective manner and the subjective judgments regarding the choice of indicators, weighting patterns and cut-off points will be open to extensive disputation.

Problem Area Approach

4.26 Earlier in para 4.8 we have talked of two alternative approaches to the problem of identification of backward areas. The first alternative based on an overall index has been examined above and not found to be acceptable. The second approach has been described there as one which tries to identify areas which cannot realise their development potential unless special measures are taken to alleviate certain crucial constraints.

4.27 The term 'problem areas' is somewhat vague and, in an under-developed economy, almost any area can claim to suffer from some deficiency that marks it out from other areas in the country. The term 'problem areas' has to be understood in the context of the concept of backwardness indicated in para 4.7 above. To reiterate, the Committee has focussed attention on the need for special measures involving directional departures or changes in emphasis in the complex of programmes, policies and institutional arrangements in the various sectors of development. A few examples will illustrate what is meant by 'directional departures':—

— The national programme for agriculture production places great emphasis on the new seed water fertilizer technology which is optimal in irrigated or assured rainfall areas. However, this technology is not readily applicable in dryland areas where an alternative technology with a different mix of inputs, services and infrastructure is required.

- In desert areas the usual mix of rural activities is not possible and activities like animal husbandry have to play a much more important role than elsewhere.
- In hill areas, effective watershed management is much more important than elsewhere and activities like horticulture and forestry are as important as agricultural production.
- In tribal areas, the gap between the potential for development and the capability of the local population to utilise it is far greater than elsewhere so that special measures to provide the advancement of tribal households are necessary.

4.28 The instances given above are not meant to be comprehensive. They only illustrate what is meant by terms like 'problem areas' or 'directional departures' or 'changes in emphasis'. The specificity of technological possibilities, variations in the sectoral mix of economic activity, differences in infrastructure requirements and difficulties in the participation of local people in new economic activities will, to some extent, be found in almost any area. However, there are certain areas where these problems are of an order that requires special measures. In this sense backwardness as defined in the problem area approach is also a matter of degree.

4.29 The usefulness of the problem area approach lies not so much in any higher degree of objectivity in the manner in which the areas are identified. Its real usefulness for the purposes of planning lies in the fact that it avoids aggregating very different types of areas into one generalised category labelled 'backward'. Such aggregation can mislead and inspire attempts at uniform remedies for separate problems. In fact it is instructive that when discussing development strategy, the draft report of the Chakravarty Committee on Backward Areas despite the fact that it used an uniform index based approach had to partition the 179 identified 'backward' districts into five groups of which the last had to be described as 'an assorted group of problem areas'.

4.30 The problem area approach has one further advantage. Unlike the index based approach it is constructive in the sense that the process of defining and identifying backward areas itself suggests the nature of the remedies that have to be applied. For example, if an area is considered backward because it faces the problem of chronic drought then the main remedy suggested is drought proofing.

4.31 The difficulty with the problem area approach lies in ensuring that all problem areas are in fact taken into account. There is no sure way of ensuring that this has been done. The approach followed by the Committee was to consult the States and the people involved in development planning at the local level in a wide variety of areas. In these consultations the constraint on development and the types of areas needing special measures could be identified. In this sense the list of problem areas reflects the considered judgment of the development administration machinery. This is all to the good since the purpose behind the whole exercise is to provide this very same machinery with guidance for planning.

4.32 A certain number of problem areas have been recognised in the special area development schemes included in the plan at present. Specifically these schemes are the Drought Prone Areas

Programme (DPAP), the Desert Development Programme (DDP), the Hill Area Programme (HAP) and the Tribal Area Sub-Plan (TASP). The Committee accepts special measures over and above the normal plan programmes. On the basis of its consultations the Committee would recommend the addition of two more categories to this list of problem areas viz. chronically flood affected areas and coastal areas affected by salinity. The justification for adding these two categories of problem areas is dealt with below.

4.33 The problem of flood affected areas has been studied recently by the Rashtriya Barh Ayog (National Flood Commission). The report of this Commission points out that flood affected areas seem to have had a poorer pace of agricultural advance than other areas. The National Committee also feels that chronically flood affected areas face certain special problems in the field of rural development. The high water levels in the flood season make it difficult to use many of the new high-yielding short duration, dwarf varieties. What these areas need for the kharif season are long term duration long-stemmed varieties which can stay above the water level and flower after the flood season. A substantial shift towards rabi cropping may also be necessary. A programme to protect human settlements from flood damage will also be required. Hence the need for such special measures justifies the treatment of chronically flood affected areas as backward areas within the meaning attached to the concept of backwardness in para 4.7 above.

4.34 Coastal areas affected by salinity were identified as areas in need of special treatment by the National Commission of Agriculture. However, no centrally supported area development scheme is in operation for these areas though the West Bengal Government has taken up a major programme of area development in the Sunderbans. Coastal areas affected by salinity cannot utilise much of the new agricultural technology and will require special measures to develop suitable salt resistant crop varieties, to reduce or control soil and water salinity, to promote new activities like brackish water fisheries etc. Hence in this case too the nature of the special measures required would justify their treatment as backward areas.

4.35 Thus the National Committee would recommend that the following types of problem areas be treated as backward for purposes of planning.

- (i) Chronically drought prone areas.
- (ii) Desert areas.
- (iii) Tribal areas.
- (iv) Hill areas.

(v) Chronically flood affected areas.

(vi) Coastal areas affected by salinity.

These six categories can be viewed as six types of fundamental backwardness. In this sense an area may suffer from the handicap of more than one type of fundamental backwardness.

4.36 The National Committee specifically called for suggestions from the States and has received several other suggestions for inclusion in the list of backward areas e.g. inland areas with saline alkali soils, ravine areas, kandi areas in the foot hills of the Himalayas and areas with a concentration of scheduled castes. Many of the suggestions have been taken into account in the criteria for the identification of each of the six categories of backward areas e.g. areas of scheduled caste concentration and kandi areas have been allowed for in the definitions proposed later for identifying tribal areas and backward hill areas. In some of the cases the Committee is of the view that the nature of the special measures required is not such that a major directional departure in development strategy is required. For instance inland areas with saline/alkaline soils will require a special programme to correct the soil chemistry. However, beyond that major changes in strategy may not be required. Hence for planning purposes such areas do not need to be treated as backward within the measure of the concept as indicated earlier in para 4.7.

4.37 The six types of fundamental backwardness identified will help to identify the areas where suitable area specific development strategies can give results. However, there is one constraint which can make this difficult. This arises from the prevalence of feudal elements in production relations. The main characteristics of feudalism is that the fruits of labour go to the people at the top and as a result, the vast mass of people at the bottom have no incentive to change. Hence directional change and area specific strategies will have no effect unless the overall fundamental defect of feudal social structure is corrected. The problem of feudal elements affecting production is found not merely in the six types of backward areas identified above but also in many others. In fact, many areas which are covered by the six types but which nevertheless seem to be backward may well be areas suffering from feudal hangover.

4.38 Besides areas affected by feudalism, a further category which is excluded from the typology presented earlier is that of areas which suffer from the lack of administrative presence. The developmental process in rural area is very dependent on initiatives stimulated by the support systems for research, extension, credit input delivery and marketing support. There are many

areas where the potential for development is not realised because these systems are poorly developed and indifferently staffed. Many instances of this can be found in areas like the north-east. The Committee recognises the gravity of this problem but for a variety of reasons has not treated administrative backwardness as a further type of backwardness. To begin with administrative backwardness is not readily measured in any objective manner. The absence of institutions and the number of vacant posts can be quantified but the poor quality of personnel cannot be reduced to any index. Secondly the answer to this problem lies in administrative action and not in any special area development programme. Finally, many of the areas suffering from administrative deficiencies are, in fact, the areas of fundamental backwardness listed earlier.

4.39 There is one further factor to which the national Committee would draw attention. This is the differential response of different communities to developmental stimuli. Studies done by the Institute of Economic and Social Change on Tumkur District show that villages with roughly similar natural endowments and human skills have responded differently to development stimuli. Some have grown whereas others, similarly placed, have not. The studies have suggested an explanation based on a concept described as the 'community element'. This refers to the ability of a community to perceive development possibilities, throw up the necessary leadership and utilise the opportunities created by the processes of

development. The variations that arise from this 'community element' are readily perceived but the concept itself is not amenable to any meaningful quantification. It is also difficult to predict in advance of the attempt that this community will respond well to some initiative and that one will not. However, the Committee would hazard a guess that many of the communities who may lack the initiative to respond vigorously to development possibilities will in fact be found in the areas of fundamental backwardness listed earlier, particularly in the areas of tribal concentration. Hence the concept of 'community element' does not define an additional category of backwardness but indicates a consideration which should be dealt into the development plans for the areas of fundamental backwardness.

4.40 The Committee has also considered the problem of industrial dispersal and in that context identified certain areas as being in need of special measures to promote industrialisation. These areas have been defined in terms of the level of industrial employment and the proximity to existing centres of industry. Industrial backwardness, in this sense, is distinct from the types of fundamental backwardness outlined earlier. It is a matter of history and cannot be linked up straightaway with an index of local potential of human endeavour. It is in a class by itself and remedies have to be sought, not in area development schemes, but in the creation of a commercial and industrial environment in a dispersed network of growth centres.

From the Draft Report of the Chakravarty Committee on Backward Areas.

Identification and Classification of Backward Areas

1. Backwardness is a relative concept, particularly in a developing country like India. However, within the overall context of under-development, observable patterns exist and areas with different kinds and severities of backwardness can be identified. Assuming that the total elimination of backwardness in the country is a long-term process, it is still necessary to identify levels of development, the factors with which such levels are associated and the features underlying structural backwardness. This necessity arises for formulating strategies for long term plans, immediate policy requirements and the choice of the instruments.

2. Such an identification should be based on an objective study of the geographic differences in the character and severity of backwardness. In order to get a feel of the spatial dimensions of backwardness in the country, the Committee conducted studies to describe and map the distribution of backwardness in detail and to relate the patterns of backwardness to the environmental, social and economic variables that may help explain the observed patterns.

Definitions, assumptions and methods

3. Given the imperfect state of regional statistics in the country, particularly for this task, there is no single measure which can effectively portray the level of development of small area units. Per capita income and unemployment are in the nature of synthetic variables measuring levels of development. But such data are not available at a fine spatial disaggregation. Further, in developing countries like India, where backwardness is in the nature of a 'collective syndrome', the backward pockets cannot all be meaningfully described by the simple two-fold criteria of unemployment and low income. Nor is it sufficient to concentrate attention on levels of per capita consumption which may be very different from levels of income generated in areas which receive large amount of remittances from out migrants. The purpose of this Committee is to provide an approach towards the formulation of plans for backward areas where backwardness refers not necessarily to poverty but to the factors which underly such poverty. These factors are complex and backwardness is a multi-dimensional phenomenon. Hence a multiple criteria approach is indicated for the identification of backward areas.

4. The approach to the identification of backward areas has, therefore, to be based on a set of what may be called 'partial indicators of development and under-development'. The selection of such a set of indicators is a crucial decision. Only such indicators should be chosen which would best express the relative variations in development among various areas units. However, the type and number of indicators that may be used for this purpose is ultimately circumscribed by data availability. Further the indicators chosen should cover a range of development aspects and should not seriously overlap among themselves. So far as the area unit is concerned, the District in our country seems to be the obvious choice since at this level not only sufficient data is available but also an administrative organisation for the formulation and implementation of plans. After examining the comparable data at present available at district level, the following fourteen variables were chosen for the analysis —

1. Density of population per square km. of area.
2. Percentage of agricultural workers to total working force.
3. Gross value of output of foodgrains per head of rural population.
4. Gross value of output of non-foodgrains per head of rural population.
5. Gross value of output of all crops per head of rural population.
6. Percentage of total establishment using electricity to total number of establishments (manufacturing and repair).
7. Percentage of household establishments using electricity to total household establishments.
8. Percentage of non-household establishments using electricity to total non-household establishments.
9. Number of workers in registered factories per lakh of population.
10. Length of surfaced roads per 100 sq. kms. of area.
11. Length of surfaced roads per lakh of population.
12. Percentage of male literates to male population.

13. Percentage of female literates to female population.
14. Percentage of total literates to total population.

5. Among the variables used, density of population is a slightly ambiguous indicator. A high density may be a measure of the pressure of population and hence of backwardness. It could also reflect higher levels of development and economic activity arising out of urbanisation. The percentage of agricultural workers to total working force is an indicator of backwardness, measuring dependence on traditional occupations in the agricultural sector. Per capita gross value of output for foodgrains is an indicator of productivity while that for non-foodgrains of commercialisation. The percentage of household establishments using electricity to total household establishments may be termed as an indicator reflecting consumption and general welfare, while that of non-household establishments using electricity could be regarded as an indicator of the growth of industry and commerce. The number of workers per lakh of population in registered factories is a measure of employment opportunities in the organised manufacturing sector. Length of surfaced roads is an infrastructure indicator reflecting accessibility standards. All the three indicators relating to literacy may be regarded as social infrastructure and attitudinal indicators. The indicators selected are generally complementary rather than substitutes. Taken together, they may be considered as representing the major dimensions of the socio-economic levels of development in the country.

6. It was felt that there was need for combining the variables into a single index of regional disparities in levels of development. Three approaches were attempted viz.,

1. The simple ranking method;
2. The indices method; and
3. Principal-component analysis.

In the case of the first two methods, density of population was not taken into account because of the ambiguity in interpretation and the remaining variables were reduced to the following six by averaging the value in the case of overlapping variables :—

1. Percentage of agricultural workers to total working force.
2. Gross value of output of foodgrains and non-foodgrains per head of rural population.
3. Establishments using electricity to total establishments (Household, non-household and total).

4. Number of workers in registered factories per lakh of population.
5. Length of surfaced roads (per lakh of population and per 100 sq. kms of area).
6. Percentage of literacy (Male, female and total).

7. In the procedure for combining the indicators, equal weightage was adopted in the ranking and indices method exercises.

The simple ranking method

8. The following procedure was adopted in this method :—

- (a) Each district was ranked as per the various indicators.
- (b) The individual ranks were added to get a total rank for the district.
- (c) Taking the median value (955) as the cut-off point, all those districts which had a value below the median value were classified as backward.

The frequency distribution of districts by total ranks is as follows :—

Categories (showing) ranges of total ranks	Number of districts
Less than 400	8
401 to 650	59
651 to 955	97
956 to 1250	65
1251 to 1500	74
1501+	23

Thus, by this method, 164 districts get classified as backward areas.

The Indices Method

9. An index of development of each district was computed on the basis of the above six indicators taking the national average position as 100. The index of development of the district was then obtained by taking the arithmetic average for all indicators. The districts with indices below 100 are treated as backward in this case. The results of this exercise as indicated below :—

Value of indices	Number of Districts
Less than 50	81
61 to 80	66
81 to 100	39
101 to 120	45
121+	75

Thus, by this method, 206 districts get classified as backward.

Principal component analysis

10. In the simple ranking method and the indices method, an equal weighting techniques was followed which is without underlying mathematical logic. The use of more sophisticated statistical techniques can meet the problem of assigning weights to each indicator. The principal component analysis was, therefore, used as a supplement to the other simple methods. In this method, all the fourteen variables were used. The principal component analysis starts with a matrix of correlation co-efficients measuring the degree of co-relation between the indicators. Operations upon the basic data matrix then extract the first factor, which accounts for the greatest proportion of the inter-correlations, leaving portions not accounted for in a residual matrix. The operations are repeated upon successive residual matrices and further independent factors are extracted, not all of whom need be significant.

11. The density of population shows significant positive correlation with indicators signifying power consumption, urbanisation, literacy and industrialisation and negative correlation with agricultural working force and length of surfaced roads per lakh of population. This may be taken to justify the interpretation of density as an 'indicator' associated with development. As expected, the percentage of agricultural workers to total working force shows significant negative correlation with all the indicators relating to urbanisation. Per capita gross value of non-foodgrains output on the other hand shows significant correlation with the variables reflecting industrialisation.

All the four variables indicating industrialisation (percentage of establishments using electricity for household, non-household and all establishments, and workers in registered factories per lakh of population) move together, suggesting that they are overlapping. Similarly, the variables on literacy (male, female and total) also reveal an overlapping nature. The length of surfaced roads shows weak correlation with other variables. From the analysis of the correlation matrix, seven variables show significant inter-correlations viz., density of population, percentage of agricultural workers to total working force, gross value of output of foodgrains per head of rural population, gross value of output of non-foodgrains per head of rural population, percentage of establishments using electricity to total establishments, workers in registered factories per lakh of population and percentage of total literates to total population.

12. The correlation matrix was then analysed to identify the major factors (if any) which summarises the structure of information. It was found that 83.02 per cent of the total variation

of the fourteen variables can be described by three basic components. Table I gives the composition of these three components:—

TABLE I

Sl. No.	Variable	Component I Backwardness	Component II Development	Component III Industrialisation
1	Density of population	(—) .41007	(—) .023562	(—) .25529
2	Agricultural workers to total working forces ..	.73840	.11679	.11891
3	Gross value of output of foodgrains per head of rural population ..	.01993	.65595	(—) .64713
4	Gross value of output of nonfoodgrains per head of rural population ..	(—) .26436	.68888	.14062
5	Percentage of establishments using electricity to total establishments	(—) .72771	.38032	.37675
6	Percentage of HH establishments using electricity to total HH establishments	(—) .41438	.35499	.43430
7	Percentage of non-HH establishments using electricity to total non-HH establishments ..	(—) .48953	.38336	.50080
8	Workers in registered factories per lakh of population ..	(—) .63850	(—) .04963	.08327
9	Length of surfaced roads per lakh of population	(—) .18506	.17188	(—) .00491
10	Length of surfaced roads per 100 sq. kms of area	.00554	.06025	(—) .08660
11	Percentage of male literates of male population	(—) .85709	(—) .28260	(—) .23920
12	Percentage of female literates to female population	(—) .90182	(—) .25175	(—) .24203
13	Percentage of total literates of total population	(—) .90750	(—) .26671	(—) .24752
14	Gross value of output of all crops (19 crops) per head of rural population	(—) .13670	.89279	(—) .40968
	Variance%	45.04	24.21	13.77

13. Component I, which accounts for 45% of all the inter-correlations of the indicators, can be obviously interpreted as a component of backwardness. For all or column 3 of the table I is fairly instructive. It can be interpreted as follows :—

The use of a mass of information on levels of development (17 variables on 326 districts) shows that 45 per cent of the independent information used tends to portray the structural backwardness in space. This aspect is strongly underlined by the negative loadings of development indicators on the first component.

The heaviest loadings which tend to pull a district down the scale of backwardness are the low degree of commercialisation, power consumption, industrialisation, literacy and density of population all pointing to a structure of backwardness.

14. In the case of Component II, the high positive loadings in respect of rural output indicators and the negative loadings in respect of density of population, literacy and number of workers in factories, are significant features. From this, the second component may be labelled as a component of rural development. In the case of Component III, the positive loadings are in respect of the variables relating to industrialisation and, therefore, this component may be called the component of industrialisation.

From the point of view of the present study, Component I is significant and Components II and III have been used as aid to refinement of interpretation.

15. In order to note the performance of each district on Component I, the score for each district was calculated. An examination of the factor scores reveals that there are distinct break-point values—1.4, 0.10 and 1.19, suggesting a grouping into four categories as follows :—

Category	Factor-score groupings	Number of districts
I ..	—3.3 to—1.5	29
II ..	—1.4 to +0.09	11
III ..	+0.10 to 1.18	161
IV ..	1.19 to 1.65	20

*In the above analysis, Meghalaya (2 districts), Nagaland (3 districts), and Tripura (3 districts), were taken as only 3 entries, since district-wise data was not available. However, while computing the total number of common districts, the actual number of districts are given.

Categories I and II indicate the relatively developed districts while Categories III and IV represent the relatively backward districts. Thus, according to this method, 181 districts in the country have been identified as backward.

Result of three methods

16. A comparative picture of the results obtained by the three methods is given below :—

Method	Cut off point for backwardness	Number of Distts.
1. Simple ranking method	Median value of total ranks-955	164
2. The indices method	Below 100	206
3. Principal component method	Factor-score above 0.10	181

A further analysis of the results of the three methods reveals that 160* districts are common to all the three methods. For the districts in Manipur (5 districts), Sikkim (4 districts), Arunachal Pradesh (5 districts), Andaman & Nicobar Islands, Lakshadweep, Dadra & Nagar Haveli, Mizoram and Ladakh data on the chosen indicators were inadequate. From the statistical material available, coupled with a *prior* understanding of these areas, these also have been at present taken into account in the category of backward districts. If this assumption is accepted, the number of backward districts comes to 179. These common districts have been taken as constituting the "hard core of backward areas" in the country.

17. The number of districts covered by at least one special programme like the DPAP, Hill Area Programme, Tribal Programme, Investment Subsidy Scheme, and concessional finance, is 298. It was found that only 172 districts out of 179 in the hard core backward area were covered by one or more programmes of the type mentioned above. There are, thus, 7 backward districts in the hard core which are still not covered by any of the special programmes. These districts are Hazaribagh (Bihar), Bilaspur (Himachal Pradesh), Satna (Madhya Pradesh), Bharatpur, Sawai Madhopur and Bundi (Rajasthan) and Gorakhpur (UP). The intention of determining backward districts was mainly analytical. The idea was to construct a framework of measuring the status of development taking into account socio-economic and structural aspects and to provide a tool for diagnosis and planning.

Distributional pattern of backward area

18. The distribution of the 179 identified backward districts reveals a distinctive pattern. It reveals a vast contiguous territory of backwardness in the Central Part of India, extending from the Northern (Telengana) district of Andhra Pradesh through a large part of Madhya Pradesh, Orissa, some eastern and northern districts of West Bengal, most of Bihar, eastern UP and extending partly into some Central and Western UP districts. The few advanced districts lying in this belt stand out as 'islands'. The central belt of backwardness is interrupted by the relatively developed districts of western UP, Haryana and Punjab to the south and east of Delhi. A second stretch of backward areas runs as a contiguous belt in the Himalayan foot hill zone including the districts of Jammu and Kashmir, Himachal Pradesh and the hill districts of UP. A third belt, which is not so continuous, stretches in the west through Rajasthan and Gujarat and is linked with the western Madhya Pradesh districts of Morena and Shivpuri extending into the central belt. Outside this whole area, the only other extensive area of backwardness is the one extending through the States and Union Territories in the North East Region. Somewhat detached from all these backward area belts are the few scattered pockets in Cuddapah district (Andhra Pradesh), Dharamapuri (Tamil Nadu), Bhir (Maharashtra), the Dangs (Gujarat) and the Union Territories of Dadra and Nagar Haveli, Lakshadweep and Andaman and Nicobar Islands. Thus the distribution of backward area in the country may be described in terms of four extensive continuous belts and seven small pockets outside these belts. The distribution is as under :—

Area	Constituent States and number of districts	
1. Central Belt	Andhra Pradesh ..	8
	Maharashtra ..	1
	Orissa ..	10
	Madhya Pradesh ..	31
	West Bengal ..	7
	Bihar ..	14
	Uttar Pradesh (Eastern, Central & Western) ..	31
	Total ..	102
2. Himalayan Foot hill belt	Jammu & Kashmir ..	7
	Himachal Pradesh ..	6
	Hill districts of UP ..	6
	Sikkim ..	4
	Total ..	23
3. Rajasthan-Gujarat Belt	Rajasthan ..	20
	Gujarat ..	2
	Total ..	22
4. North-Eastern Region	Assam ..	6
	Meghalaya ..	2
	Nagaland ..	3
	Arunachal Pradesh ..	5
	Tripura ..	3
	Manipur ..	5
	Mizoram ..	1
Total ..	25	
5. Isolated Backward Pockets	Gujarat ..	1
	Andhra Pradesh ..	1
	Maharashtra ..	1
	Tamil Nadu ..	1
	Dadra & Nagar Haveli ..	1
	Lakshadweep ..	1
	Andaman & Nicobar Islands ..	1
	Total ..	7

5. CRITERIA AND STRATEGY FOR BACKWARD AREA DEVELOPMENT

INTRODUCTION

5.1 In the previous chapter the Committee has outlined the concept of backwardness and, in the light of this concept, suggested the following categories of backward areas :

- (i) Tribal Areas
- (ii) Hill Areas
- (iii) Chronically Drought Prone Areas
- (iv) Desert Areas
- (v) Coastal Areas affected by Salinity
- (vi) Chronically Flood Affected Areas

5.2 The Committee has dealt with the development of problems of these areas and suggested remedies in separate reports. Chronically drought prone areas and desert areas have been dealt with in one report while the remaining four have been dealt with in four separate reports. These reports contain recommendations of the Committee on the criteria for identification and the strategy for development that needs to be followed in each of the area. The purpose of this Chapter is to summarise the broad approach in each of these reports. The Committee would emphasise that the individual reports, rather than the summary of these contained in the Chapter, should form the basis for action.

5.3 The Committee has dealt with the problem of each type of area separately. However, there are some areas which can fall into more than one category of backwardness. For example, there is an extensive overlap between tribal and hill areas particularly in the north-east. There is also some overlap between tribal and drought prone areas e.g. in south-east Rajasthan. In these cases the appropriate strategy has to be to combine the remedies suggested for both types of areas.

5.4 There is one important aspect of development strategy that is not dealt with in this chapter. This is the organisation of administrative and financial structures for development. This aspect, which is common to all type of areas is dealt with in a later chapter.

TRIBAL AREAS

Criteria for identification

5.5 At present the Tribal Sub-Plan cover all scheduled areas and tehsils/blocks with more than 50% tribal population, leaving the tribal

majority states/U.Ts. of Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, Lakshadweep and Dadra & Nagar Haveli. The tribal sub-plan approach aims at a comprehensive development of the area with, of course, particular focus and emphasis on the tribals. However, in these areas there are other sections, particularly scheduled castes, who have a symbiotic relationship with scheduled tribes. Often they are the middlemen and have almost assumed the role of contact group for tribal communities in their relationship with the modern system. At the same time many of the scheduled castes in this area share the tradition of the tribal communities. Any scheme of development which does not take into cognisance at least the problems of scheduled castes is likely to result in imbalance and the possibility of manipulation of programmes. Hence the National Committee has recommended that all tehsils/blocks where scheduled tribes and scheduled castes taken together constitute 50% or more of the population should be covered under the Tribal Sub-Plan (paras 3.35 and 3.36 RTA).

5.6 In spite of differences in problems between different zones there are a few common features of tribal economic and social life which have to be taken into account in the formulation of any development strategy. Some of the common features are as follows :—

- (a) Their habitat is isolated and the terrain in these areas is difficult. The transport system is not well-developed.
- (b) Agriculture and collection of forest produce together contribute the bulk of the income of tribals.
- (c) Methods of agriculture are old fashioned and production is oriented to subsistence requirements.
- (d) The barter system for exchange of services and commodities still exists in tribal areas, the market remain unorganised and commodity loans predominate making it easier of money lenders to operate.
- (e) Tribals spend large amounts of their income on social and religious ceremonies as a result of which they are perpetually indebted to the money-lenders.
- (f) Their low rate of literacy makes them vulnerable to unscrupulous persons in the bureaucracy or the forest contractors or outsiders.

Constitutional Provisions

5.7 The Indian Constitution envisages a special position for the protection and development of tribal communities. The Fifth Schedule of the Constitution gives the Union Government a special responsibility for administration of the scheduled areas. The various constitutional provisions relating to the administration of the Scheduled Areas are complementary to one another and provide a broad frame for action. However, a satisfactory plan of action has to be drawn up to operationalise all these elements in such a way that they function in unison. In particular, the basic elements which go to determine the quality of administration have to be clearly defined. The constitutional responsibility of the Central Government for ensuring effective administration must be discharged. For this purpose, arrangements are necessary for assessing the state of administration in these areas and for ensuring that the state Government take suitable remedial measures.

Elimination of Exploitation

5.8 Elimination of exploitation is the essential first step. The basic approach and development policy in tribal areas has, quite correctly, laid great stress on protective measures. However, this cannot provide a solution to the problems inherent in a situation where two different systems of unequal strength, are coming in increasingly closer contact with adverse implications for the traditional. The strategy for tribal development, therefore, should stress measures for building the inner strength of the community so that they are able to face, as quickly as possible, the new system on terms of equality. The tribal areas are passing through a stage when the individual has to cope with conceptual changes in relation to property, ownership of natural resources etc. In this frame, education and health services have to be given a high priority in the developmental profile of the tribal areas. They have to be accepted not only as necessary investment for faster economic growth but also as an effective protective device during the transitional phase.

5.9 Some of the tribal areas have rich resources but lack of infrastructure inhibits progress in many ways. However, infrastructure in these areas needs to be defined in comprehensive terms. Infrastructure can be broadly classified in three categories viz., (i) Economic, (ii) Institutional and (iii) Physical. Economic infrastructure, in this context, should comprise stabilisation of their *de facto* rights in a form acceptable in the new system. The institutional infrastructure includes extension services, financing institutions, local bodies etc. The tribal communities are handicapped by their unfamiliarity with these institu-

tions and benefits accruing from such developmental efforts do not, therefore, generally reach them in due proportion. Therefore the normal structure should be modified and designed so that they are within the comprehensive of the tribals and they become active participants. The physical infrastructure comprises road network, electricity, etc. This infrastructure by itself cannot be a sufficient condition for tribal development and unless it is linked to specific economic programmes suitably adopted for the benefit of tribals, it may result in back lash effect.

Sociological Factors

5.10 There are certain sociological factors that have to be taken into account in planning tribal development. The tribal is often loth to accept the discipline of the new economic system. This can be taken into account, to some extent, by reworking the schedule of operations in a manner more suitable for them. The thought systems of the tribals are often very different from those of non-tribals. However, they can be used in a creative way to promote new ideas. Many of the traditional social customs of the tribals particularly drinking, have been exploited by vested interests at a heavy cost to the tribal community. Social education and voluntary efforts in this area is a pre-condition for meaningful economic programme.

Relationship with Scheduled Castes

5.11 The members of the scheduled castes and other communities at the same poor level in tribal areas need to be identified and helped to establish themselves in alternative occupations and contribute to the growth of the local economy. Some of them can become the new entrepreneurs with suitable assistance from the state. However, it will have to be ensured that Scheduled Castes do not emerge as a new exploiting class.

5.12 In family oriented programmes, the proportion of different needy communities other than the exploiters in the tribal area may be the guiding factor for fixing the number of beneficiaries in each group. The members of the Scheduled Tribes may be assigned a share in proportion to their numbers with some weightage in their favour, the number of Scheduled Caste in proportion of their numbers and the balance being assigned to other people belonging to the weaker sections of the population. The concessions offered to Scheduled Castes in tribal areas should not be less than what is offered to them in non-tribal areas.

Forests and the Tribals

5.13 The tribal communities in India largely occupy the forest regions where, for a long period in their history, they have lived in comparative isolation. These communities have had

a symbiotic relationship with the forests as was the case in the early history of most human societies.

5.14 However, it is clear that rights on the forests as were envisaged in the early days cannot be sustained in the same form. The rights in forests can be sustained only if there is comprehensive frame for the protection, use and development of forests in which the community and the individual must assume the responsibility for creation of new forest wealth and its protection. Thus, the tribal community which has symbiotic relationship with the forests, should be accepted as partners in the local forestry development efforts in each area. Today, it is possible by choice of a suitable technology and production pattern that any piece of forest land, about a hectare or so, can make a family economically viable, and forestry organised on modern lines holds great promise in tribal areas.

5.15 It is necessary that a systematic plan of action is worked out for minor forest produce so as to eliminate exploitation. The price of minor forest produce should be remunerative and linked to the market price and all leases for collection of minor forest produce should be given exclusively to cooperatives of tribals. It is also necessary that the first processing of minor forest produce is organised within the tribal areas and through the cooperative system. The main objective should be to retain maximum benefit from this activity within the local economy which should accrue to the primary collector.

5.16 The investment policy in the forestry programmes has tended to over-emphasise the exotic needs of the modern sector disregarding some times the needs of the local economy. The programme of forestry, therefore should make adequate provisions for mixed plantations with the objective of providing the tribal community with their basic requirements and increasing production of minor forest produce which may help them to supplement their cash incomes. A minimum percentage of useful species in all plantations should be fixed for each area taking into account their potential and the needs of the local economy.

5.17 Another important aspect of forest and the tribal economy which needs urgent attention is the method of working of forests. The bulk of the labour is casual and seasonal and recruitment is often through contractors. The essential tasks are cooperativisation of forest labour, making forestry operation as dependable a source of employment as is possible and giving the community a sense of participation by sharing with them the profits of forestry activity within the area.

5.18 An important problem for forest policy in tribal areas is that of shifting cultivation (jhum). The strategy for controlling shifting cultivation must depend on the extent to which the jhum cycle has been reduced by the growth of the population and the pressure on land. The problem is so widespread particularly in the north-eastern region, that all the households involved in shifting cultivation cannot be made to change over to settled cultivation even within a time period of 5 to 10 years. In this situation the strategy should be to concentrate on improving jhum in those areas where the cultivation cycle has not come down, say, below 10 years. In areas where the cycles is less than 5 years also, immediate steps to promote a settled cultivation should be taken. The remaining areas will probably deteriorate in a few years and in these preliminary steps towards settled cultivation must be started. There are various models of settled cultivation based on crop production, horticulture, plantation, animal husbandry or a combination of these. The model that is appropriate in any local situation would depend on physical features like slope, soil depth etc., on the availability of infrastructure and on the aptitudes of the population. Hence the control of shifting cultivation will require detailed surveys for determining area-wise priorities and location specific planning.

Land and the Tribals

5.19 One of the important characteristics of a tribal community is its association with a territory and a tribal within this territory considers himself to be the owner of the and the occupies by virtue of his traditional association and his personal effort in making it cultivable. However, over the years a variety of factors have loosened the tribal's holds on his land. The absence of land records, the pressure of outsiders and the connivance of officials has let to situation where substantial areas of tribal land have been alienated. Though various State Governments have taken a number of measures from time to time for protecting tribal lands the total impact of all these measures has not been very significant.

5.20 The Committee has recommended that all transfers of land from tribal to non-tribals should be prohibited and prohibited effectively. Where no law exists, a suitable law should be enacted immediately. Simultaneously changes in legal procedures are necessary to ensure that the tribal is not defeated by the complexities of judicial processes. For example, oral evidence must be given full value in proceedings, the onus of proof that land has been acquired legitimately must rest with the non-tribals, the number of appeals must be limited etc. Pass books for recording land rights must be introduced. Special legal assistance should be provided. Measures to restore alienated land are necessary and to

ensure this it may even be necessary to alter the statute of limitation. The regulation of land transactions in tribal areas must also direct themselves at measures to prevent fragmentation of holdings. Deforested land must be allotted exclusively to tribals.

5.21 The stabilisation of the land resource base of the tribal is a pre-condition for effective advance in agriculture and allied sectors. The protective measures referred to above can provide a firm base for a development programme. The new economy has to be built on the basis of a family-wise programme taking care to ensure that the schemes are not too complex and are without the management capabilities of the tribals.

Education and the Tribals

5.22 Education must assume a key role during the present phase of tribal development and must be conceived in comprehensive terms to cover all aspects of community life where they come in touch with the new system. The most important aspect of education in tribal areas has to be that the community should be enabled to have a clear perspective of their relationship with the modern system.

5.23 Education in the elementary schools should be location specific. A child who may spend eight years in a school should come out better equipped for life in the village. The curriculum should be suitably restructured so as to have elements of agriculture, forestry, animal husbandry, cottage industry, etc. and the teaching of subjects should be relatable to specific problems. A programme of 'citizen education' with a comprehensive frame covering the needs of all sections of the tribal population is necessary. This should basically aim at protecting the community from a sudden cultural shock and enable it to graduate through the transitional phase without any erosion of their economic base.

5.24 Planning of education infrastructure should be adapted to the existing distribution of population with the clear objectives of providing universal coverage to children by the school system and also provides an effective citizen education to the community. In sparsely populated areas the organisation of educational institutions may be based on the concept of an elementary school complex consisting of 5 or 6 schools with one of the schools acting as a focal point.

5.25 At present there are schemes for providing financial assistance to tribal students by meeting the costs of education. Even though, general assistance may continue for all communities, special schemes on a more liberal scale should

be prepared for the more backward areas and more backward communities. Unless a suitable differential is built into the educational assistance scheme the gap will continue to grow and the process of educational spread may not pick up.

Cooperatives and Tribals

5.26 A tribal requires a package of services, the main components of which are credit for production as well as consumption, supply of seeds and other agricultural inputs and consumer goods and marketing of produce both agricultural and minor forest. These activities constitute the major areas of exploitation of the tribals. Large size-multi-purpose cooperative societies (LAMPS) are meant for this purpose, if LAMPS are to be effective, they have to be streamlined and restructured to provide short, medium and long-term credit for agricultural purposes; supply of agricultural inputs and essential domestic requirements, provision of technical advice and guidance, marketing of agricultural produce or products of allied activities and of minor forest produce, credit for expenses incurred to meet certain social obligations, primary processing of minor forest produce and the promotion of thrift. The entire package of services of the LAMPS should be available to the Scheduled Tribes and to every other poor family in the tribal sub-plan area identified on the basis of normal criterion.

5.27 The development strategy suggested by the Committee can be summarised in terms of the following principles:—

- effective fulfilment of constitutional responsibilities,
- restoration of the tribals links with his principal productive resources viz. forests and land.
- education that is relevant and will help him to cope with the new economic system,
- institutional measures to protect him from exploitation in the supply of credit or essential goods or in marketing.

These principles clearly indicate a strong emphasis on administrative, political and social measures as essential before the economic or technological factors can really benefit the tribal. This is a consequence of the nature of the basic constraints on development in tribal areas.

BACKWARD HILL AREAS

5.28 In the Himalayas the Committee has accepted the areas already demarcated as hill areas in Uttar Pradesh, West Bengal and Assam as backward hill areas for special consideration. The exclusively hill States of Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Manipur, Mizoram, Nagaland, Meghalaya, Sikkim and

Tripura are already treated specially as backward States and the needs of the backward areas in these exclusively hill States should be looked after under the State Plans on the basis of the guidelines we have given for dealing with backward hill areas.

5.29 In identifying the backward hill areas of the Western Ghats, the Committee has recommended that, excluding areas covered under the tribal sub-plan for which separate provision exists, the rest of the hill areas above 600 meters contour in the Deccan belt should be considered backward hill areas. The Committee has also recommended that all khandi areas in the foothills of the Himalayas should be treated as backward hill areas.

5.30 It has also been generally accepted that the problems of development are far more onerous and intractable in remote and inaccessible hill areas. The major problems which are more or less common to these hill areas can broadly be identified as follows :—

- (i) The terrain is usually rocky and undulating and land available for agricultural operation is limited.
- (ii) Hills have problems arising from land slides and soil erosion.
- (iii) There is lack of adequate irrigation sources and what there is has a high cost of exploitation and maintenance.
- (iv) Communications and transportation facilities in hill areas are often inadequate.
- (v) Agro-processing and storage facilities remain inadequate.
- (vi) There is a lack of suitable and adequate marketing facilities in hill areas particularly those located away from the hillstations and important towns.
- (vii) Terms of trade are unfair. Producers get low prices for their produce and at the same time the people in hill areas have to pay exorbitant prices for what they require.
- (viii) There is a general reluctance on the part of officials and staff to take up assignment in these areas. Because of out-migration of the educated and skilled adults local people remaining behind are not educated and advanced enough yet to fill up the gap.
- (ix) Records of right in land are inadequate.

5.31 Any strategy for development of hill areas has to take note of the economic constraints of the environment and to try to maximise productivity directly by crop production supplemented by suitable subsidiary occupations which the environment can support.

Basic Approach

5.32 The majority of the people in the hill areas are living at the subsistence level and, therefore, there is an urgent need to raise the productive capacity of the economy by encouraging income generating activities like horticulture, animal husbandry, social forestry, tourism, etc. This may mean a change from a subsistence food crop to possible cash crops which may give more return. Then there is the problem of out-migration of adult males in search of employment outside imposing a heavy burden on women. In order to slow the progress of outmigration, generation of gainful employment locally has to receive a high priority for improving the quality of life of the people. Collection of fire wood and bringing water from long distances occupy a great deal of time of women in hill areas. To reduce the drudgery of the women folk in these pursuits and also for providing them with subsidiary occupations to raise their standard of living, problems of supply of fuel, food and drinking water should be tackled on a priority basis.

5.33 Because of the paucity of administrative support and communication, no householder in the backward hill areas will risk the possibility of not producing a certain minimum food crop for his own family and depend on other people for his food. The problem can be solved if in areas where the food crops are replaced by new cash crops (a) suitable marketing facilities are built into the system to buy the production at fair prices and take them off the hands of the farmers of the area and (b) arrangements are made to supply the foodgrains commonly consumed in the area in fair price shops so that the farmers can buy his requirements at reasonable prices.

5.34 Development will have to be taken up first in the zones which can be much more productive under the new strategies and on the communication routes. The Committee is of the view that resources survey of various hill areas is essential for better planning of soil, water and crop management and also formulating plan for the region and it has, therefore, recommended that appropriate resources survey maps should be drawn.

Watershed Approach

5.35 In hill areas it will be generally found that the area for social and economic planning will be a watershed. Communication follows the streams. Social groups and village boundaries are generally coterminous with watersheds as communication across watersheds is difficult because of the terrain. The Committee, therefore, recommended that the watershed should be the primary planning unit rather than a block or a

district. The watershed approach provides a sound basis for programming of soil conservation, water harvesting and harnessing of land use and planning social institutions. It is also possible to delineate watersheds into micro and mini-watersheds. A mini-watershed may be equated with the concept of a focal point and may cover an area of a cluster of villages with a population coverage of a fifth or sixth of a block population and micro watershed may cover an area of 1000 to 1500 hectares.

5.36 The watershed approach should mean planning and implementing soil conservation programmes for all types of lands and associated drainage system in the watershed within a reasonable time frame, with the objective of providing maximum protection to existing land and water resources while optimising their use for increasing production and employment benefits. It will, therefore, be necessary to undertake appropriate programme for preparation of a framework of watersheds by delineating the catchments and sub-catchments into smaller units and codifying them with a system which will be understandable to all users. Once delineation and codification is done, inter-se, priorities for the development of these watersheds should be assigned.

5.37 Once priority watersheds are identified and land classification completed it will be necessary to identify the areas needing treatment under agriculture forest and other land use practices. Depending upon a number of factors, such as slope, soil, rainfall etc., a package of treatment measures will have to be chosen.

Land Use

5.38 The land use in the hill areas as in other parts of the country has been guided mostly by the pressure of the population on land and the tendency is to bring under cereal production even marginal lands unsuitable for cultivation. This problem is specially acute in the hill areas and has led to cultivation on slopes and on poor soil profiles thereby leading to very rapid soil erosion and a permanent loss to the productive areas. It is, therefore, necessary to see that the land use is adjusted to the potential of the land without leading to land deterioration. This can only be done by an active and intelligent extension approach. The farmer will have to be given alternative which are more profitable to him.

5.39 Broadly speaking, forest covers in the hill slopes are ideal and should get priority. Cultivation, of hill slopes should be discouraged as far as possible as this causes erosion. Even the high value crops like potatoes which cause erosion should not be encouraged on slopes. There should be long-term policy for covering

such areas under perennial crops. The Committee has recommended that degrees of slopes beyond which cultivation should not be allowed may be specified for different regions.

5.40 As far as possible, horticulture should be encouraged in combination with soil cover. Soil cover should preferably be comprised of grass-cover mixtures suitable to the locality. This will provide a very good combination for horticulture and animal husbandry both of which can be complementary.

5.41 The approach that the Committee is suggesting need not necessarily mean that large amounts of foodgrains have to be imported from the plains. The watershed approach also involves the development of irrigation. The Committee has pointed out that with suitable high yielding variety of foodgrains being used, the hill areas can grow much more food than what they are being today. Thus, the strategy must be to increase the irrigated areas in the zone taken up for a change over to horticulture, pasture development, vegetable growing, etc.

Animal Husbandry

5.42 Livestock rearing is of special significance in the economy of the hills as it is a key component of the mixed farming systems prevalent there. The quality of cattle in hill areas should be improved by an intensive cross-breeding programme. Because of the cooler climate higher levels of exotic blood are acceptable in the hills than in the plains with corresponding improvement in productivity. However, cattle development in the hills can only be taken up if arrangements for fodder supply are improved. Methods to improve the fertility and productivity of common pastures are necessary. The possibility of utilising nutritious fodder from forage trees has to be investigated and established. There is great potential for sheep development in the eastern and Central Himalayas but here too pasture development is an essential concomitant. Piggery development holds great promise, particularly in the north-eastern region, where there is a high concentration of pigs and a substantial demand for pork.

Forestry

5.43 The importance of forest cover on hill slopes cannot be overstated. In fact a very substantial portion of the forest areas of the country lies in the north-eastern region, the Himalayas and the Western Ghats. In recent years there has been extensive deterioration in the forest cover in hill areas because of the growing requirements of fuel and timber of a rising population, the deterioration brought about by uncontrolled grazing, damage from fires, the prevailing system of rights.

5.44 A suitable strategy will have to be developed for managing the forests in the hill areas of the country to answer the problem of environmental stability, at the same time meeting the needs of the hill people who are very much dependent on forest for many of their daily requirements. The density of population is on the whole much less than the average in the plains. Yet because of the abject dependence of the people of these areas for their fuel, fodder and to some extent food requirements in their daily life, forest areas have been severely depleted. Starting with the civil and community forests the depredations have now gone on into the reserved forests. As a result large areas though recorded as forest areas, at present, do not appear to have much of cover either in the shape of trees or grass resulting in severe soil deterioration.

5.45 The minor forest produce in all forest areas gives substantial employment though seasonal to the people in the areas in collection and sale of the minor forest produce. The general policy is that the purchase of minor forest produce in the forest areas must be departmentally managed so that the collection of minor forest produce are given a fair price for their labour. This has yet to be developed on a large scale. Because of this uncertainty about the availability of fair prices and a continuous opportunity, there is over exploitation of the minor forest produce. A consistent policy will have to be developed to ensure that the tree wealth, which gives the minor forests produce is not only maintained but developed. Secondly, a fair price should be given to the produce based not necessarily on the labour charges alone, by complete departmentalisation of minor forest produce collection so that the urge to over-exploit is also curbed.

5.46 In the north-eastern region there is the problem of the extensive areas of forest that are outside the control of the Forest Department and are owned by district or village councils. In the interests of eco-system management it is essential that silvi-cultural control over these forests is exercised by the Forest Department even though the ownership and the income from the forest remain with the district or village council.

Industrial Development

5.47 Industrial development in the hill areas has to be based essentially on the promotion of such activities in which hills, offer a distinct advantage like forest based industries, vegetable and fruit processing etc. Another area in which hill areas offer an advantage in terms of climate and dust and pollution free environment is electronic and precision goods. The major advantage of such industries is that they do not involve heavy transportation of raw materials.

These are mainly skill based industries where the value added is substantial. Necessary steps will have to be taken for training and skill development so as to prepare the environment for location of such industries.

DROUGHT PRONE AND DESERT AREAS

5.48 From the point of view of this Committee drought proneness is a type of fundamental backwardness which needs amelioration. The fact that certain parts of the areas may have irrigation and other opportunities which are taken into account at present cannot affect the backwardness of the area where drought conditions persists. Since our objective must be to find the means for increasing and stabilising productivity in backward areas, it seems reasonable to follow, for this purpose a synoptic definition that a block can be defined as drought affected if the pattern and quantum of rain precipitation, during the main crop season of the area, makes the traditional cultivation of the main crop of the area hazardous in three years or more out of every 10 years.

5.49 In order to delineate an area as drought affected, on the basis of the criteria mentioned above, one needs location specific data on rainfall, the major crops in the area, their evapotranspiration rates and the soil moisture conditions and retentivity so as to work out the water balance for the major crops in the area. The pattern of rainfall is generally available at the block level but there has not been sufficient adaptive research yet in the country to work out the other parameters. If a scientifically accurate definition of drought proneness has to be introduced, it will be necessary first of all to gather these location specific data at the block level. This is going to be a long drawn process. Meanwhile, it is not desirable to depart suddenly from whatever programmes have been developed for amelioration of drought prone areas as presently defined. The Committee has, therefore, recommended that till the necessary data are collected and a scientific assessment of drought prone blocks is made, the present area under the drought prone area programme may continue to be handled under the special area programme. It has been pointed out the Committee, during its discussions with the States, that even on the basis of the present criteria, there are certain areas which needs to be brought within the drought prone area programme. The Committee has recommended that all such cases should be examined on merit on the basis of the existing definition and brought within the programme if they qualify. At the same time, it would only be reasonable to expect that blocks which have already come to a level of development which will put them outside the drought prone area category, should be removed from the programme.

5.50 As in the case of semi-arid areas, the delineation of arid areas also demands more data than are available at present. However, from the trend of variation of rainfall and temperature amongst meteorological stations, the moisture parameters and observable arid region characteristics, a reasonable delineation, however, approximate has been made. The area classified as hot arid lies in the States of Rajasthan, Haryana and Gujarat. The Committee has not recommended any change in the present delineation.

5.51 Apart from hot arid areas, there are cold desert areas in the country—in Ladakh valley in Jammu and Kashmir and the Lahaul and Spiti and Kinnaur region in Himachal Pradesh. As in the case of the hot and arid regions, the Committee has not recommended any change in the present delineation.

Strategy for Development

Basic Approach

5.52 The economic backwardness of the drought prone districts outside the desert area is due to not only the limitation of natural advantages but also to the manner in which the existing endowments have been put to use by men. The climatic and environmental conditions in these areas are less harsh than in the desert region: But unplanned over-exploitation of natural resources and neglect of conservation measures are responsible for a substantial imbalance in the ecology of these areas. The imbalance has arisen because of factors like denudation of forest and tree growth, over grazing, crop farming on marginal and sub-marginal lands, the resulting surface run off of rain water and soil erosion. This is what underlies the precarious production base and low productivity. In attempting the development of these areas, therefore, the restoration of the ecological balance between the water, the soils, the plants, the human and animal population should be a basic consideration and should underline the development strategy. This will require an appropriate land use pattern which will be conducive to attaining the necessary ecological balance. If a proper balance is achieved, it is possible that there should be better and more uniform retention of soil moisture vital for the growth of crops and other vegetation.

5.53 The problems of the desert areas are different in many ways from those in the semi-arid and dry sub-humid regions. An analysis of the situation shows a very complicated trend. Total cultivated areas much less than total areas available for cultivation. Considering the density of livestock population, one would expect the uncultivated lands to be used as range lands, but this is not the case. There are as much different

patches of land, cultivated or uncultivated, distributed in scattered bits, except may be for large units identified as forest lands. Animal wealth is under-exploited, in spite of the fact that the tract can boast of the best Indian dual purpose breeds of cattle and recognisable breed of sheep. The livestock economy is migratory in character, mainly due to lack of all the year around grazing and water facilities. In years of drought, a large number of animals, both cattle and sheeps die due to malnutrition and diseases, thus depleting a valuable resource.

Watershed Planning

5.54 For a complete watershed approach one has to bring soil conservation measures, water conservation and storage measures, dryland farming, animal husbandry, afforestation and minor irrigation as the minimum number of discipline under a coordinated approach. At present, the watershed approach (in the DPAP) is one of the many programmes that the district carries out under DPAP. It is taken as a separate programme by itself with a coordinated approach limited to the watersheds taken up under the programme. On the other hand, in the drought prone districts, many programmes of soil conservation, water conservation dryland farming, animal husbandry, afforestation and minor irrigation are carried out both under the DPAP programme and under the general departmental programme of the State. A haphazard and scattered handling by each department of its programmes does not lead to the end result, one can get in a watershed approach if all of them cooperate within the watershed. This cannot happen unless the DPAP itself does not treat a watershed development programme as a separate type of programme but brings this in as a concept of coordinated handling of all the disciplines.

5.55 A watershed is a natural hydrological entity in its technical sense. It is a defined area which does not allow any water from outside the catchment to enter it and allows its water to discharge to a common point in a stream, rivulet or river.

5.56 A watershed approach to planning involves a careful study of basic physical features like the physiography, land slope, nature and depth of the soil and the hydrological behaviour of the soils slopes in the watershed. The type of soil conservation measures and moisture conservation measures and the allocation of the various parts of the land for the right type of vegetative cover, grass trees or agricultural crops will depend on this initial analysis of the physical characters. As a first approximation in planning this approach should be within the present traditional frame of land use with modifications

acceptable into the field. The next stage of development will be through demonstration and discussions to get the acceptance of the people in the watershed to the proper land use on the basis of proper soil and water conservation plan.

Role of Agro-Meteorology

5.57 Rainfall varies a great deal in the semi-arid and arid regions and the temperatures and high and generally moisture stress would be felt in some part or the other of the growing period of the major crop of the areas. The strategy should be to see that during the crucial growth periods of a crop, there is sufficient moisture in the soil to support evapo-transpiration requirements. This needs a close link up between the pattern of rainfall in the area, the probabilities of the soil retaining sufficient moisture and cropping pattern.

5.58 In this context, the water balance technique seems to be a dependable approach for the objective of drought prone area amelioration as it takes into account precipitation, evapo-transpiration and soil moisture storage and attempts to arrive at a balance between water income and water loss. However, owing to paucity of experimental data on evapo-transpiration and soil moisture over the semi-arid tropical regions of the country and evolution of appropriate area specific agro-climatic models, it is necessary to make a start with the preparation of a sowing rain commencement chart with available climatic data. The next step of great biological consequence to crop in problem areas is to assess the average inter-spell duration i.e., the mean period between effective rain spells. The third step is to assess the duration over which the soil can sustain the crop before moisture replenishment through precipitation takes place. These three steps put together and considered in relation to the soil and flora lead to a distinction between the various degrees of drought proneness and also identifying hard core areas. By identifying the hard core areas, this approach also indicates the locations for intensification of ground water exploration, identifying possibilities of other methods of water supplementation, setting up of seed, fodder and fertilizer banks, etc. in the areas which are likely to be worst affected.

5.59 The statistical approach outlined above is useful for planning on a long range basis and has to be combined with a seasonal planning according to the progress of the season and march of weather. It is here that combined discussions among agro-meteorologists, agronomists, plant protection and extension officials would help in farming area specific bulletins for dissemination through mass media channels,

5.60 The Committee has recommended that the State Agricultural Universities, in collaboration with the Indian Meteorological Department and other concerned organisations, should take up such an analysis in hand immediately.

Land Use

5.61 Sizeable parts of the area in the drought prone districts are not fit for arable farming. However, in actual practice, there has been growing trend towards bringing these areas under crop farming and crop husbandry has thus been taken to the marginal and sub-marginal lands.

5.62 The important point to be considered is how to reverse this trend. Today the technology is available to provide greater income to the farmer from the lands unfit for crop farming by putting these marginal and sub-marginal lands under pasture, horticulture, afforestation.

5.63 Despite the technology being available and its economic feasibility being established, the farmers are not changing over to new pattern. The trouble is that every household is anxious to somehow produce sufficient foodgrains because of the fear of drought and famine, and also for a carry over for the next year when the food crops may fail. If the farm population is to be brought out of this fear complex and persuaded to change the present pattern of land use, there must be some guarantee that they will get their food requirements throughout the year at a reasonable price, from nearby fair price shops. This is the first essential and foremost support for a proper land use strategy.

5.64 The next step is to prepare an inventory of the natural resources of all arid and semi-arid lands. Surveys which provide comprehensive information with regard to land use capability classes, vegetation, types, water resources socio-economic conditions and human-animal-vegetation relationship, etc. are necessary. Utilising the micro guidance given by such studies, the position will have to be refined for each block by suitably constituted inter-departmental groups so that extension workers can be guided on the types of land use that can be introduced with profit.

5.65 Once such maps are available, it would be necessary for the concerned planning and development authority in the area to draw plans to take up relevant developmental strategy for such lands as are found unfit to give better return or are in a position to give better return if diverted to uses other than crop farming. The Committee considers this as a very essential step not only for proper land use and improving the productivity and economic conditions of

the people living in these areas, but also in restoring the ecological balance which would go a long way in not only improving the conditions of the people in these areas but would also be in the large national interest.

Water Resources

5.66 Rainfall being scarce and highly variable and evapo-transpiration being generally high, water for development in the most scarce commodity in drought prone areas. Proper management of water to get maximum result out of the available precipitation, therefore, assumes extreme importance in the strategy for drought prone area amelioration. One of the systems of management is providing suitable irrigation schemes. The other type of management is moisture conservation of the precipitation on the land.

5.67 Whereas a lot can still be done by tapping available surface and ground water resources in the drought prone districts, it has long ago been realised that amelioration of drought prone districts can only be carried out effectively by transfer of water from more richly endowed basins to the drought prone areas. In future planning, the strategy will have to be to ensure that such inter-basin transfers are systematically developed and relief given to drought prone areas, particularly those which do not have much of natural precipitation. In badly drought affected areas, surface irrigation by gravity should be combined with lift irrigation to give relief to areas on a higher contour.

5.68 It is necessary that waste of irrigation water should be avoided and that the crops should be so selected that they give maximum productivity for the water used and the timing of water so arranged that evapo-transpiration balance is maintained during the crucial periods of crops growth.

5.69 It will generally be found that surface irrigation projects will have a command much larger than what the storage water can irrigate under the present principles of irrigation. Similarly, the command of a ground water resources or a lift irrigation resource will be much higher than what the irrigation system can cover under present principles. In such a situation the available water has to be distributed over the command on an equitable basis. Our first objective should be to ensure that each family in the area gets a reasonably firm base for his economy so that in serious droughts only marginal help will be needed for the family. There is, justification for bringing in the principle of social justice and equating distribution of water to the families.

5.70 Ground water exploitation and conjunctive use of ground and surface water will be an essential ingredient, in agricultural development of drought prone area. With saline ground water a proper planning of conjunctive use of saline and fresh water and suitable agronomic practices and selection of cultivators tolerating levels of salinity, will all have to be fitted in to the programme. Percolation tanks have special value in drought prone areas but such a programme will not give the maximum benefit unless the down stream open wells are constructed.

5.71 The provision of drinking water supply is important element in any programme of development in drought prone areas. These areas experience acute scarcity of drinking water, both for human population as well as livestock, because of low rainfall. In fact, no development of livestock is possible in potential areas without the facility of drinking water. Priority attention, therefore, needs to be given to locating sources of drinking water in those areas.

Crop production

5.72 Successful dry land agriculture requires a two-pronged strategy. When the monsoon is normal, it should be used most effectively. The second part of the strategy comes into operation the moment the weather turns aberrant. This approach must outline for each agro-ecological region the list of anticipatory measures and alternative crop strategies that ought to be adopted when there is evidence of the incidence of drought. This kind of programme involves steps like altering crop patterns, proper development and management of irrigations sources, mid-season corrections in crop planning, introduction of crop life saving practices and building up of an appropriate seed and fertiliser buffer to implement the drought cropping strategy.

Animal Husbandry

5.73 Development of livestock has an in built superiority over crop farming in the drought prone areas in so far as fodder cultivation is less vulnerable to the dry spells and the harsh climatic conditions in these areas. Because of this, animal husbandry in conjunction with dairying can offer a more stable base than crop farming for sustained income for the rural households in these areas.

5.74 The drought prone areas are characterised by the scarcity of fodder and grasses for feeding livestock because of diversion of land to crops. The arid districts have less than five per cent area under pastures, though the pasture areas in the other DPAP districts are larger.

Notwithstanding the land resource constraints, these areas do offer considerable scope for pasture and fodder development in the available areas with the latest technology for fodder crops and pasture development. This is an essential precondition for successful animal husbandry programme. The other problem is that of drinking water. This would have to be provided for in the water resource development plan.

Diversification of Economic Base

5.75 The main emphasis in the drought prone areas has so far been on agriculture and allied sectors and on restoration of ecological balance. But for an integrated development of any area, agricultural sector alone cannot help to achieve the objective. One of the major reasons for deterioration in the ecological balance in these areas has been excessive pressure of population on land. Therefore, unless alternative sources of income are provided to the population, any attempt to promote optimum use of land and water cannot succeed in spite of the improved dryland agricultural practices.

5.76 There is seasonal out-migration of various types of labour from many drought prone areas in the country to take advantage of the semi-skilled labour opportunities available in the large scale industries and construction development taking place in the country. There is also seasonal migration to other areas. In planning the development of drought prone areas, these out-migration opportunities should not be lost sight of. It may be necessary to assess these opportunities and utilise them instead of trying to keep back people in the drought prone areas under low wage employment schemes.

Research and Extension

5.77 It is quite clear that a large number of technological innovations are available with research station for increasing the productivity of drought prone areas. The major problem is the transfer of appropriate technology to the people in each specific watershed of promoting rational use of land, water and other natural resources. Effective transfer of appropriate technology for watershed development would involve the following activities :—

- (i) ascertaining the present level of technology in use in the related sectors ;
- (ii) identifying the type of technology needed and suited for the felt needs of the population of the water-shed in general ;
- (iii) based on such feed back, need for adoption or adaptation of available technology for improving the productivity of the area and preventing the ecological deterioration ;

(iv) testing the suitability of new specific technology in different agro-physical and climatic regions requiring a large number of adaptive field trials and operational research projects under different geographical and socio-economic conditions ; and

(v) strengthening the linkage between research and field personnel.

5.78 It has to be noted that the development of appropriate technology for the drought prone areas requires an effective feedback mechanism. The research has also to give priority to the development of low cost technology. A careful analysis of the methods of agriculture, animal husbandry, etc. in these areas might indicate that a few modifications in the existing practices could yield better results instead of introducing new innovations which may not only be costly but may also require lots of efforts before the farmer could be persuaded to take them up. It is, therefore, essential that the research should aim not only at evolving new technologies but also on improving upon the existing ones. More important than anything else is the need to bring about a multi-disciplinary approach in research.

5.79 With regard to extension the Committee has drawn attention to the potential of a suitably modified Training and Visit method. In the T & V method there is a back stop by a Technical Group which trains the VLWs every fortnight during the cropping season or the programme to be put across in the field in the next fortnight. This technical group is expected to keep itself in tune with the season by being based on a demonstration farm where they will be replicating the programme and using it for training also where necessary. This back up technical group with a base experimental areas is crucial for watershed programme. Besides the technical disciplines involved in the T & V, a soil and a water specialist will have to be included.

5.80 Whilst the above technical group will meet the requirements of all aspects of soil and water management and agronomy, the watershed programme has subsidiary production lines in animal husbandry, horticulture and forestry. The Committee has recommended that the expertise for this should be included in the Technical Group under the Project Administrator.

5.81 Effective conservation and water harvesting is difficult to accomplish individually as there are community problems related to the characteristics of watersheds. Therefore, any package of technology having the potential to provide attractive benefits to the farmer requires a community approach and cooperation for its successful adoption.

Desert Development

5.82 The economy of the desert areas should continue to be mainly animal husbandry oriented. The desert area has a natural endowment of several good breeds of cattle and sheep. A major thrust of the development programme has to be on the prevention, in a large measure, of the nomadism of the cattle breeders and sheep owners. An organised programme of livestock development will have stabilising influence. An increase of animal population is, however, ruled out, since the vegetable resources even after development cannot sustain a large number. While containing the number, the breeding programme, through provisions of facilities and services, will have to be designed to improve the quality and productivity of cattle and sheep.

5.83 In the arid areas the major emphasis has to be on sheep development. The good breeds of sheep available in this region can be further improved both for wool and mutton. Apart from improving the quality of sheep, wool sheering and grading centres have to be established and arrangements made for wool and meat marketing. Another dimension to this development is the possibility of creating more employment in the cottage industry by processing the wool locally. For this, adequate extension support will be necessary.

5.84 A vigorous programme of livestock development is possible if feed and fodder resources are substantially increased to ensure the supply of nutrition to the animals. Attention has, therefore, to be paid to large scale development of pastures, regulated grazing to prevent over-use and creation of grass reserves and fodder banks for supply of hay in scarcity years. In canal command areas, the cropping pattern has to be adjusted to bring 30 per cent of the area under fodder crops in mixed farming.

5.85 Integrated plans of development have to be so designed as to pay simultaneous attention to the development of water sources, animal husbandry and pastures. In the strategy of development, water plays a pivotal role. Since there is a paucity of local water resources, water has to be inducted from outside the arid zone. The Rajasthan Canal project is an instance of such an effort. This canal is designed to irrigate areas along the western boundary of Rajasthan but the interior desert areas do not derive any benefit from it. The project should be recast to exclude unsuitable areas, where the cost of land levelling and development will be high and to construct lift canals to take some water deeper into the desert with a view to bringing more areas under irrigation and extending the benefit to a larger section of the community.

5.86 The limited quantity of ground water available in pockets can be exploited mainly for domestic and industrial use, it being rather expensive for irrigation. Large parts of the desert will still have to depend on rain. For maximising the utilisation of the scanty rainwater, suitable water conservation techniques like khadins bandhis and well have to be adopted on large scale.

5.87 In the early stages of development of the canal command areas, there will be water to spare in the canals. This opportunity needs to be utilised. As water becomes available in an area, a large scale programme to tree plantation, raising of shelter belts and wind breaks and rejuvenation of vegetal cover will have to be undertaken. This programme will arrest wind erosion, sand blowing and sand casting on arable fields and also reduce the desiccating effect of hot winds on crops. Tree and grass cover on the unstable and new dunes in the canal commanded areas and on those which pose a threat to habitations, roads and railways should reduce the problem being faced now. The plantation programme is also intended to meet the requirements of fuelwood and small timber locally and to prevent over-exploitation of the existing resources.

Cold Deserts

5.88 The cold desert in the country occurs in Ladakh Valley in Jammu and Kashmir. The Lahaul Spiti Valleys and the Kinnaur region in Himachal Pradesh are also considered as cold semi-arid areas. The population in these areas is sparse. The extreme climatic conditions, lack of communication and the level of education make development of these areas a difficult task. All efforts made so far to develop these areas have achieved little success.

5.89 The agricultural season in Ladakh is limited to a short period between May and October in view of the high altitude, extreme cold, deficiency of oxygen and humidity. There are some streams and glaciers but there are problems associated with the utilisation of this water at higher elevations. The possibility of tubewell irrigation has not yet been established. The main crop taken in this area is crim, a kind of barley. This area has, however, a valuable resource in pashmina goat.

5.90 The Committee would like to emphasise that the available information is not sufficient for formulating the strategy for development and indicating the feasibility of different programmes. In its view, many more investigations and more extensive research based on local environmental conditions and physical and socio-economic constraints are required before viable economic

programme can be implemented effectively in these areas. This has to be given the highest priority.

Coastal Areas Affected by Salinity

Criteria for Identification

5.91 The National Committee on the Development of Backward Area considers the problem of salinity on coastal areas as one type of fundamental backwardness. The Committee has suggested that the identification of such coastal saline areas to be based on a two pronged criteria to demarcate (a) soil salinity areas where the top soil is saline, and (b) water salinity areas where either the water strata for great depths is saline, or even if top 30 ft. has fresh water where fresh water is entirely by rainfall alone. For identification the development technology suited to different conditions, it has been suggested that these areas be identified in terms of (a) saline soils, (b) saline alkali soils, (c) non-saline alkali soils, and (d) degraded saline alkali soil.

Strategy of Development

5.92 The Committee advocated different strategies of development for the east and the west coasts respectively. On the east coast the principle of developing existing skills will lead to the obvious strategy of developing fisheries. The next important part of the economy will be agriculture in which some beginning of development can already be seen in these areas where fresh water is available. Development of village industries and tertiary sector growth will have to follow the primary growth in both fisheries and agriculture. In the west coast the entire economy will be based on fisheries except where agriculture can be developed on the lines of Kuttanand. However, it will be found that such development on the west coast today would be a high cost development and may not be economic.

5.93 The Committee has recommended systematic soil survey so that areas of high, medium and low saline conditions could be identified for seeking remedial measures. It has also been stressed that evaluation of the various measures already taken by the State Government is of equal importance.

Fisheries

5.94 On the question marine fishery which provides substance for most of the fishermen in the coastal areas, optimal utilisation of the resources should be the prime aim. This will

require rational provision of facilities for processing and marketing, including export of frozen fish. On account of the serious competition between the traditional and mechanised boats there is a need for cost benefit analysis to demarcate the sphere of operation for each of them. In case of any displacement of traditional fishermen, suitable rehabilitation needs to be provided.

5.95 Brackish water fisher can provide sizable potential for development. Hectare for hectare brackish water fisheries gives much income than the composite fish culture followed in inland fresh water fisheries. Further, with availability of remunerative technology in brackish water fisheries, the use of scarce fresh water for culture fisheries should not be encouraged. Committee has stressed the need to help smaller people to pursue brackish water fishery. For appropriately developing the individual small farms, support through an area development approach and provisions of appropriate supporting services including technical services, is necessary. Transfer of technical knowledge to the fishermen is of vital importance and the responsibility on that count should be shouldered by the State Governments by providing the technical consultancy free of charge.

Agricultural Development

5.96 Agricultural development in the coastal saline areas has to rely on the adoption of a crop pattern in which suitable saline tolerant varieties are chosen. On account of the scarcity of fresh water, the Committee has suggested that suitable cash crops with low requirements of fresh water need to be chosen.

5.97 Horticulture development is seen to be another very remunerative pursuit to be followed. Sustained research efforts are necessary to find out the suitability of cultivators for better production. In the present setting, coconut production is seen to be the most remunerative horticulture strategy. For appropriate development of horticulture etc. and also for complete protection of habitations, the Committee has recommended the shelter belt approach.

5.98 Animal husbandry does not have much developmental possibilities in these areas till appropriate type of fodder varieties can be developed to sustain that development.

Transport

5.99 To meet the growing demands of fisheries and agriculture etc. road communications have to be developed to bring the marketable goods

to the main urban markets. All weather roads may prove very costly and may not be achievable within an acceptable time frame. The Committee views the utilisations of pedal trays on cheap road system, as developed in Sunderban, to be the appropriate road development strategy.

5.100 The Committee has dealt in some detail with the problems of the Sunderban area of West Bengal and Saurashtra and Kutch areas of Gujarat. The entire area of Sunderban faces the problem of salinity, water logging and drainage. In the absence of up-land water supply the area is exposed to tidal action making the water highly brackish. For the development of the Sunderban an integrated programme simultaneously covering crop production, fisheries, animal husbandry and forestry and providing for improvement in infrastructural facilities including communication and supply of potable water will be necessary. For the protection and development of land and increasing availability of fresh water for agricultural and drinking purposes, engineering and other measures as envisaged both in the Interim Plan of development of the Sunderban and in the Sunderban Delta Project should be undertaken. Industrial development should be restricted to such agro-based industries as do not aggravate the problem of fresh water in view of its limited availability. As an integral part of the overall development of the region, river, road and rail transport facilities should be considerably improved. Electrification should be extended to the area to support development.

5.101 In the case of Rann of Kutch and Saurashtra areas, the possibilities of brackish water fish culture are seen to be immense. The Narmada water availability in the area is bound to change the entire complex and as such a review of the development strategy at that moment would be desirable.

Chronically Flood Affected Areas

Criteria for Identification

5.102 Chronically flood affected areas constitute one of the types of fundamentally backward areas identified by the National Committee. The Committee has recommended that such areas should be identified on the basis of the following four criteria :

- (i) Flood frequency of at least one in three years,
- (ii) flood duration of at least 7 days period at a stretch,
- (iii) flood depth of more than the standing paddy at that time, and

- (iv) flash flood with strong current liable to uproot even if the duration is less than 7 days.

5.103 In order to delineate precisely chronically flood affected areas in different flood-prone river basins which are by and large already known to local authorities, certain basic data need to be collected. These include (i) records of stream flow (gauge and discharge) data extending as far as back as may be available, (ii) data on rainfall in the catchment area producing the floods, (iii) contour maps showing areas flooded in different years and corresponding depth and duration of floods at salient point of the affected area.

5.104 The Committee has recommended the identification of all the flood affected blocks through ground surveys etc., within a period of two years so that satisfactory ameliorative programme can be introduced. The committee has no hesitation in saying that the actual areas requiring attention in the country will be much smaller than the area liable to floods.

Strategy for Development

Embankments

5.105 The Rashtriya Barh Ayog (1980) has examined at considerable length the various factors that cause heavy floods in different river basins deltas and has indicated the measures for rectifying the same. The intensity of the problem has been identified to be severe in the States of Assam, Bihar, Orissa, U.P. and West Bengal. For protection from the inundation and possible damage, the RBA has advocated a proper master plan for embankments. It has suggested abandonment of badly planned embankments and suitable strengthening and maintenance of other embankments to avoid breaches. The National Committee feels that any problem of flood amelioration must first ensure that this basic recommendation of the RBA is translated into effective action within a reasonable time frame.

5.106 Embankment breaches and consequent damages are, in most cases, man-made. The Committee has suggested that remedy for this needs to be sought in people disciplining themselves to ensure that technical advice in these matters is obeyed meticulously and legislations are faithfully observed. The Report of the Committee, however, does not concern itself with such human action and is addressing itself only to area which are affected by the natural havoc and is in the flood plains outside the existing embankments demarcated in the Master Plan.

The Committee feels that this is where nature's direct havoc on the economy will be felt and considers that if it is of chronic nature, it would create problems of backwardness.

Flood Damage

5.107 Flood damages can be of two types viz., crop damage and damage to house and cattle. People have adjusted themselves to the nature of the environment in areas which are flooded by mainly growing paddy in these areas and by sheer experience they have evolved methods to grow the right type of paddy. The paddy plant can normally survive seven days of submergence (which is taken into account in the identification criteria suggested above). Normally, it will be found that areas where floods cause crop damage of a severe nature to the paddy cultivation will also be the areas where house damage and cattle damage would occur. As such the Committee has stressed that if the crop fed area involved is identified, the other problem areas will automatically be identified to a larger extent.

Cropping Strategy

5.108 The Committee has recommended that an appropriate cropping strategy would be to popularise suitable flood escaping or flood tolerant cropping system or intensifying crop production with irrigation in flood-free months. Keeping these in view the Committee has dealt with some of the cropping strategies and sequences for five identified States where chronically flood prone areas predominantly exist. The detailed cropping patterns have been given in the relevant Chapter of the Report on the Chronically Flood Affected Areas. Intensive research activities have developed newer varieties of crops suitable for flood prone areas and the Committee advocates the restructuring of the cropping accordingly.

Irrigation

5.109 For popularising such a cropping strategy it will be necessary to make available irrigation facilities in such areas. To suitably back up the envisaged cropping pattern strategy the Committee has advocated a fairly comprehensive irrigation strategy. Khadir lands and diara lands are fairly well identified in different States affected by chronic floods. Generally such lands which are in the vicinity of rivers have a fairly high water table and it is possible to arrange for irrigation by tapping ground water through, for instance, shallow tube wells which have to be covered or sealed during the monsoon season when there is high flow in the rivers with consequent submergence. Areas which are in the fringes

of the dry weather flow line of the river can be irrigated by providing river lift pumps and the distribution can be arranged by portable aluminium or flexible polythene pipes which can be removed before floods inundate the areas. In either case the pumps and motors have also to be portable and have to be removed during the flow of the river.

5.110 With regard to power for pumping as far as Khadir lands are concerned it may be possible to provide overhead electric transmission lines which may not get affected during the flood season. So far as the islands diaras are concerned and the Khadir areas where the submergence during flood season is high diesel sets have to be preferred even though the cost of pumping will be higher. This is suggested because it would be very costly to take the electrical transmission lines nearer the river edge with high submergence and also across the rivers to supply power to the lands.

5.111 Apart from the Khadir areas and the island diaras there are several other pockets in the States referred to above where water stagnates in the natural depression even after flood season for a long time and no crops are grown. The chauris of North Bihar and the "Bheels" in West Bengal are typical examples of such areas. In such areas a strategy to retain some water in the natural depressions for providing lift irrigation during the later part of the rabi season and during hot weather season should be considered. If part of these chauris are deepened and isolated by wire netting even inland fisheries and water plants which command good market can be developed.

5.112 It may also be possible to carry canal water for irrigation land rendered flood-free during rabi and summer seasons if there is any major, medium or minor surface irrigation scheme operating in the relatively higher areas in the neighbourhood. In Assam there are many small tributaries of the Brahmaputra which carry perennial flow. A system of lifting water during the rabi and summer season is already in vogue in some parts of the State. This programme should be accelerated.

Upper Reach Control

5.113 For knowing the precise details about the behaviour of the upper reaches the Committee has recommended that full potential of the Lands at Imagery be utilised. For reducing of run-off, the Committee has recommended (i) prohibition of production in hilly catchments, (ii) contour bunding in hilly catchment, (iii) construction of flood retention reservoirs,

(iv) small check-dams on the tributaries to delay run-off to point of concentration and (v) elaborate flood fighting arrangements at vulnerable points with adequate support of flood forecasting and warning thereof. The Committee has favoured the watershed management approach for the upper reaches management and has recommended that the trade-off, between the two conflicting alternatives of low flow augmentation or flood reduction, be decided through cost benefit analysis. For effective implementation of the pro-

grammes an inter-disciplinary team for each basin has been favoured.

Human Settlements

5.114 For the protection of human settlements various alternatives like strengthening of house structures, raising the level of the whole village or ring bunds around villages have been considered and the pros and cons of each have been highlighted in the Report of the Committee.

6. INDUSTRIAL DEVELOPMENT OF BACKWARD AREAS

The National Committee's approach to the identification of backward areas has been based on the recognition of various types of fundamental backwardness, viz., concentration of tribal population, hilly terrain, drought areas, chronically affected areas by floods and salinity in coastal areas. Industrial backwardness, however, is a category apart and is not a matter of environmental constraints. It is largely a matter of history and cannot be linked up straightaway with any index of local potential or human endeavour. The problem of industrial development of backward areas has engaged the attention of policy makers for a long time. The National Committee has dealt with this aspect in detail in three reports :—

- ✓ (i) Report on Industrial Dispersal
- ✓ (ii) Report on Village and Cottage Industries ; and
- ✓ (iii) Report on Industrial Organisation.

These reports deal with the entire range of manufacturing industries from household industries to large projects. They contain recommendations on a wide range of policies, programmes and institutions for promoting the industrial development of backward areas. The first part of this Chapter summarises the conclusions and recommendations in these three reports. It also examines some of the recommendations in the light of subsequent discussions with State Governments. There were two issues relating to industrial backwardness which the National Committee had not dealt with in its earlier reports, viz. the transport subsidy scheme and State Government incentives for industry. These two aspects are dealt with in the second and third part of this chapter.

Industrialisation of Backward Areas

6.2 The present pattern of location of industry is a consequence to a large extent of the early phase of industrialisation in India. The major industrial centres which had developed during this period were Bombay, Calcutta, Madras, Delhi, Ahmedabad and Bangalore. The share of these centres in manufacturing employment rose from 4.7 in 1921 to 9.6% in 1951 and 12.9% in 1971.

6.3 A variety of policy measures have been used to influence the pattern of industrial location. In the early phase of development, the emphasis was on the location of public sector

enterprises in backward areas and on the development of industrial infrastructure in these areas. An attempt was also made to use licensing policy to push industries into backward areas. A major change in the policy package came about with the institution of the Central investment subsidy scheme and the scheme of concessional finance in 1971. To this were added certain concessions in corporate tax to units in backward districts which came into force in 1974.

6.4 The Committee has evaluated the working of policy measures particularly the investment subsidy and Concessional Finance scheme in some detail. The bulk of the subsidy seems to have accrued to States which were not considered backward by the Pande Working Group on whose recommendations the schemes were established. The pattern of dispersal also shows that amongst the eligible districts, a small number which are at close proximity to relatively developed industrial centres seemed to have derived a major part of the benefit. The Committee's evaluation also shows that the availability of concessional finance and subsidy has been a significant motivating factor in determining location decisions.

6.5 In the case of public sector units, the Committee found that much of the investment had flowed to backward areas. This is true not merely of units based on local raw material but also of engineering enterprises. However, the Committee notes that the multiplier effects from these large projects in backward areas have been very limited mainly because government directives on ancillarisation do not seem to have pursued with any degree of vigour.

6.6 In the Report on Industrial Dispersal, the Committee has outlined the strategy for industrial dispersal. The central principle of this strategy is that incentives for industrial dispersal should be given in a manner which persuades industries to move away a sufficient distance from existing centres into remoter areas. At the same time the Committee recognises that there are economies of agglomeration and that the new centres which have to be developed away from existing centres must be of sufficient size. Hence the Committee has combined the dispersal approach with a growth centre approach. The salient features of the specific recommendations of

the Committee for operationalising the strategy are listed below :—

- (i) The cut off criterion for the selection of centres for the development of medium and large industry would be that they should have a population of at least 50,000 and that they should be situated at a minimum, distance from an existing industrial centre. For this purpose "existing industrial centres" should be all town/urban agglomerations with an employment in non-household manufacturing of over 10,000. The minimum distance should be 150 kms for centres with an employment of over 150 thousands, 100 kms. for centres with an employment of 50—150 thousand 75 kms. for centres with an employment of 25—50 thousand and 50 kms. for centres with an employment of 10—25 thousand.
- (ii) 100 such centres should be selected out of all eligible towns for development in the Sixth Plan.
- (iii) Each growth centre should be managed by an Industrial Development Authority which would have the charter to development and provide the necessary infrastructural support as well as to mobilise funds from institutions like IDBI, HUDCO etc.
- (iv) For institutions like IDBI, HUDCO etc. to play an effective role, it would be desirable that appropriate financial support to these institutions is assured during the Plan period.
- (v) State Governments should undertake to provide the requisite infrastructural facilities at the selected locations and to orient their own promotional efforts in the same direction. Urban development programmes may be used in these centres on a priority basis.
- (vi) The schemes of Central capital subsidy, concerning finance and income-tax concessions may continue for the Sixth Plan period for all small industries located outside the cut-off areas specified under recommendation whether located in a growth centre or not. The infrastructural support the Committee will be recommending for each growth centre will not be available for industries which may come outside such growth centres.

6.7 The Committee has discussed its recommendations with several State Governments and various suggestions for modifications have been

made. The Committee would like to take this opportunity to react to some of these suggestions.

6.8 It has been suggested that the areas ineligible for incentives within a State should be defined only in terms of areas around existing centres within the State. Thus the effect of centres outside the State should not be taken into account. The Committee has considered this suggestion but is unable to agree with it. The spread effect of industrial centres do not recognise State boundaries and we have several instances of new centres that have developed because of the impulse generated by existing centre outside the State e.g. Hosur in Tamil Nadu and Alwar in Rajasthan. The acceptance of this suggestion would create an anomalous situation in a place like Delhi where it would mean that areas in the neighbouring States on the border of this highly developed industrial centres would be eligible for incentives and concessions. However, the Committee accepts that the spill over effects of a centre outside state may be somewhat lower than in the State itself and some modifications of the distances may be acceptable. A shorter distance accepted by general consensus among the States for such a situation may be used for determining ineligible areas in a State because of the effects of existing centres outside the State.

6.9 Several States have suggested modifications in the assumed cut off distance on the ground that the spread effects of industries are not as wide as the figure recommended by the Committee would suggest. The cut off distances recommended by the Committee reflect a judgment which the Committee considers valid. The main argument advanced by States is for a shorter distance. The Committee is prepared to accept a shorter distance criteria provided the distance is not made so short that our objective of industrial dispersal in all the backward areas of the country is thereby not reached within a forceable future.

6.10 The Committee has defined existing centres on the basis of the level of employment in non-household manufacturing as per the 1971 Census. It has been argued that non-household manufacturing includes a large number of workers and in small scale manufacturing units whose spread effects are likely to be much less than that of large factories. Hence it has been suggested that the cut-off distances applicable to centres where the major part of employment is in tiny units should be somewhat lower. The committee feels that there is some validity in this argument. However, statistics to differentiate between employment in tiny units and other units are not readily available. If such data can be obtained, the Committee would not have any objection to different weights

being given to tiny unit employment and other employment in non-household manufacturing, the relative weights being determined by consensus. The weighted employment would be the standard employment figure for identifying 'existing centres'.

6.11 The modifications suggested above are in the nature of refinements in the schemes suggested by the Committee in its Report on Industrial Dispersal. The basic thrust, however, remains in that the objective must be to disperse industries away from existing centres into the interior so that within a reasonable time frame backward areas have the advantage of an industrial economy. Only then will there be some measure of equity in the access to industrial employment in different areas.

6.12 The Committee has dealt at some length with the policies and institutions required for promoting small industry in backward areas. These areas suffer from a lack of entrepreneurship and in the early stages of development the small industry is likely to be the major activity at least for local entrepreneurs. Hence the promotion of small industries in these areas is of paramount importance.

6.13 The major items which need to be covered in any policy package for small industries are:

- (i) Entrepreneurship development
- (ii) Credit
- (iii) Raw Material supply
- (iv) Common service facilities for repair and maintenance, finishing, testing etc.
- (v) Marketing support.

In its report on Industrial Dispersal as well as in the Report on Industrial Organisation, the Committee has made many specific suggestions in each of these areas. This would need to be pursued with vigour if industrialisation of backward areas is to be promoted. The Committee has also emphasised the role of labour training and suggested specific measures for ensuring that local people benefit from the industries set up in backward areas.

6.14 The promotion of industries in backward areas will require extensive support from official agencies. In its report on Industrial Organisation, the Committee has examined the working of existing institutions in the support system and suggested measures for strengthening organisations like SIDO, SISI, the Directorate of Industries, DICs etc. The strengthening of this institutional infrastructure is of vital impor-

tance if the basic objective of industrial dispersal is to be achieved.

6.15 The problems of village and cottage industries are essentially different from those of small industries. The Committee has dealt with them in its report on the subject. The significant point that emerges from an examination of available data is the decline in the employment in village and cottage industries despite the many measures which have been taken to protect and promote them. The strategy suggested by the Committee focusses attention on three crucial elements. The first is upgradation of technologies to ensure quality standards, reduction of drudgery and higher productivity. Second, a covering organisation to provide the required support for raw material supply, marketing, credit and technology and third a group approach in which cluster of artisans are identified and served by the covering organisation. The Committee has suggested a variety of measures for translating this strategy into action. The role of village and cottage industries in diversifying the employment structure in rural parts of backward areas is very substantial and the measures suggested by the Committee would need to be pursued with vigour.

Transport Subsidy Scheme

6.16 In pursuance of a decision taken by the Planning Commission had set up two Council at its meeting held in September, 1968, the Planning Commission had set up two Working Groups to study the question of regional imbalances. One of the Working Groups was to recommend criteria for identification of backward areas and the other was to recommend fiscal and financial incentives for starting industries in backward areas. The latter Working Group made a recommendation in the following terms for provision of a transport subsidy for industries in selected backward and remote areas of some States and Union Territories.

"Transport Subsidy : We feel that there is a case for giving transport subsidy for reasons of special remoteness of certain areas for taking out the finished products for a period of five years. Upto 400 miles the distance should be considered as normal and beyond that the transportation cost for finished products should be subsidised for such backward areas as may be selected in the States of Assam, Nagaland, Manipur, Tripura, NEFA and Andamans. The transport subsidy should be equivalent to 50% of the cost of transportation in the case of the backward areas specified in J & K State".

6.17 The matter was examined in greater detail by a Committee on Transport Subsidy headed by Shri T. Swaminathan. The recommendations of this Committee were as follows :

- (i) A transport subsidy should be given by the Centre for promoting growth of industries of all sizes in certain selected areas.
- (ii) The scheme of transport subsidy should be limited only to the States of Jammu & Kashmir, Assam including Meghalaya, Nagaland and the Union Territories of Manipur, Tripura and NEFA.
- (iii) Transport subsidy should be given only in respect of industrial raw materials which are brought into and finished products taken out of the State of Jammu & Kashmir and the north-eastern region and not for internal movement.
- (iv) In the case of Jammu & Kashmir State, the subsidy should be given for transport costs between the rail head at Pathankot and the site or location of industrial unit in the State. When the railway line is extended upto Jammu & Kashmir and opened for traffic, subsidy may be restricted to movements between Jammu and the site of an industrial unit.
- (v) In the case of Assam, including Meghalaya, Nagaland, NEFA, Manipur and Tripura, subsidy should be given on the transport costs between Siliguri and the site of an industrial unit. While calculating the transport costs, the cost of movement by rail to/from the nearest railway station and cost of movement by road from/to the nearest rail-head to/from the location of an industrial unit; should be taken into account. In the case of goods moving entirely by road or other mode of transport, the transport charges may be limited to the amount which the unit might have paid had the goods moved by rail up to the nearest rail head and thereafter by road.
- (vi) Freight charges for movement by road should be determined on the basis of transport rates fixed by the Government concerned from time to time or the actual freight paid, whichever is lower.
- (vii) Cost of loading or unloading and other handling charges such as from the railway station to the site of units should not be taken into account for the purpose of determining the transport subsidy.
- (viii) All new industrial units to be set up subsequent to the announcement about the transport subsidy, should be eligible for subsidy equivalent to 50% of the transport costs of both raw materials as well as finished products.
- (ix) The existing units should also be eligible for the subsidy provided that they undertake expansion or diversification subsequent to the announcement about the transport subsidy, resulting in an increase in production of at least 25 per cent over the average annual output during the preceding three years. In such cases, the subsidy should be restricted to 50% of the transport costs of the additional raw materials required and finished goods produced as a result of the expansion or diversification.
- (x) Except for the plantations, refineries and the power generating units, all other industries, in public as well as the private sectors, should be eligible for the transport subsidy, irrespective of the size of the industrial units.
- (xi) 50 per cent of the transport charges for movement of steel from the Gauhati stockyard to the site of the industrial units in the north-eastern region should also be subsidised.
- (xii) Claims for transport subsidy should be scrutinised and settled by the Directorates of Industries of the States and Union Territories and, therefore, the Governments concerned should be reimbursed by the Ministry of Industrial Development and Internal Trade.
- (xiii) In order to check any misuse of the subsidy, it would be necessary for these Directorates of Industries to carry out periodical checks to ensure that the raw materials and the finished products in respect of which the subsidy had been given, were actually used for the purpose by a system of scrutinising of consumption of the raw materials and the output of the finished products.
- (xiv) The proposed scheme of transport subsidy should be implemented for a period of five years.

The above recommendations were accepted and the scheme was put into effect from July, 1971.

6.18 The Transport Subsidy was initially introduced with effect from 15-7-1971 to the States of Himachal Pradesh and the North-Eastern Region comprising the States of Assam, Meghalaya and Nagaland and the Union Territories of Manipur, Tripura and NEFA. For Jammu & Kashmir, Pathankot/Jammu were declared the railheads and for the North Eastern Region Siliguri was declared the railhead. From 24-8-1972 the scheme was extended to the State of Himachal Pradesh and the hilly areas of Uttar Pradesh, comprising the districts of Dehradun, Nainital, Almora, Pauri Garhwal, Tehri Garhwal, Pithoragarh, Uttar Kashi and Chamoli. For Himachal Pradesh, Pathankot, Kirtipur Sahib, Nangal, Kalka, Ghanauli, Yamuna Nagar, Barara and Hoshiarpur were declared the railheads and for hilly areas of Uttar Pradesh, Dehradun, Rishikesh, Moradabad, Bareilly, Kotdwara, Shahjahanpur and Rampur were declared the railheads. With effect from 1-12-1976 the scheme was further extended to the Union Territories of Andaman and Nicobar Islands and Lakshadweep with Madras Port and Cochin Port respectively as the local points from which the transport subsidy would be admissible. Finally on 5-12-1977 the scheme was further extended to the State of Sikkim with Siliguri as the focal point.

6.19 In the case of Andaman and Nicobar Islands, the transport subsidy is given on transport costs by sea and road between Madras Port and the location of the industrial unit in the Union Territory. In the case of Lakshadweep, the transport subsidy is given on transport costs by sea and road between Cochin Port and the location of the industrial unit in the Union Territory. If any other port on the mainland is used for the purpose of transport, the transport costs are limited to the amount which the industrial unit would have incurred, had Madras or Cochin Port, as the case may be, been used or the actual transport costs, whichever is less.

6.20 The total amount disbursed under the transport subsidy scheme is reported in Annexure I. As these data show the disbursements under the scheme are nominal and amounted to Rs. 20 lakhs only upto 30-9-1980. The low level of utilisation of the scheme suggests that, as presently designed, it does not seem to serve any useful purpose. Hence the rationale of the scheme needs examination.

6.21 The transport subsidy scheme, as presently designed, subsidises the cost of transport of raw materials and finished goods from some defined rail head to the plant site. The defined rail heads have been indicated in para 6.18 above. It will be seen that these rail heads are situated at a considerable distance from major markets and raw material sources in metropolitan cities, ports and other industrial centres. The cost

of transportation from the defined railhead to these centres of demand and raw material availability is not subsidised. A large industrial plant situated in the interior in the north-east may be linked mainly with Calcutta for raw material supply or marketing of output. These plants will get a subsidy for the movement upto Siliguri but not for the onward movement to Calcutta. Similarly a plant in Kashmir will get a subsidy upto Pathankot/Jammu but not for any further movement to Delhi. Hence the real advantage accruing from the subsidy may not be a very substantial proportion of transport costs, particularly considering the involved procedures for claiming the subsidy.

6.22 The transport subsidy is calculated as if the movement takes place by rail whenever railway facilities are available and by road otherwise. However, plants in remote regions or destination even if rail facilities are available all the way because of the advantages of point to point movement and safety of material. In this case too the proportion of the subsidy to actual transport costs is greatly reduced.

6.23 For the purposes of the subsidy mining units are not considered industrial units and there have been suggestions that this should be corrected if the exploitation of mineral resources in remote regions is to be promoted.

6.24 One final point worth noting is that the definition of raw material does not cover fuels. This is a particular problem in Jammu & Kashmir, Himachal Pradesh and the hill areas of Uttar Pradesh where fuel requirements of industrial plants have to be met by imported coal or diesel or fuel oil.

6.25 The transport subsidy scheme in its present state does not seem to be very effective as is clear from the very low level of disbursements. Hence the National Committee is of the view that an alternative approach is required to meet the problem of high transport costs and uncertain availability of raw materials in remote areas.

6.26 The types of industries that are likely to be set up in the remote and hilly regions fall broadly in the following categories :—

- (i) Major raw material based units,
- (ii) Units based on the climatic or environmental advantage of hilly regions;
- (iii) Industries to supply local demands
- (iv) Other small and village industries.

Industries in the first category as well as small industries based on local raw materials would not require any subsidy of raw materials if they are properly located. The problems of internal transportation within the regions and the linking

up of supply areas with the industrial plant would have to be covered by suitable infrastructure investments. However, these raw material industries may then require subsidiary inputs which may come from outside the region. Industries based on local demands may require raw materials from outside the region for which a transport subsidy may be of some use. Environmentally based industries like electronics or drugs are basically not transport intensive and the incidence of transport costs in the total costs being low, the benefits of a transport subsidy may be limited. Small industries in the region may well require raw materials from outside. Some saving in the cost of these raw materials would certainly help but better availability is probably important.

6.27. The Committee would suggest that the transport subsidy scheme should be linked up with the improved arrangements for raw material supply, that it has suggested. The Committee has recommended the establishment of a state level supply and marketing corporation for supporting small and village industries. In view of the Committee these corporations should be responsible for much of the raw material supply from outside the region. The Committee would suggest that the transport subsidy on raw materials should be payable to these corporations when established and other official support organisations rather than to the using enterprises. Such a subsidy may be easier to police and administer than the present arrangements. The Committee would recommend that, for controlled or canalised raw materials, the transport subsidy should be calculated on the basis of the lowest cost of transportation from the actual supply point to the concerned depot of the support organisation.

6.28. The transport subsidy on raw materials cannot be limited to controlled or canalised raw materials supplied through official support organisations. It would have to cover other raw materials as also supplies obtained directly by industrial enterprises in the eligible regions. The Committee would recommend the presence of a transport subsidy in these cases on the following basis :—

- (i) The source of supply may be deemed to be Delhi for eligible areas in J&K and Himachal Pradesh, Lucknow for eligible areas in U.P. and Calcutta for eligible areas in the north-east, Sikkim and West Bengal or the actual supply point if it is nearer.
- (ii) For a certain distance from the deemed or actual source of supply no subsidy should be payable. This cut off distance will have to vary for the different eligible areas and may be determined

after closer study by the Ministry of Industrial Development. This same subsidy may also determine the proportion of transport costs for movements beyond the cut off distance which would be subsidised.

- (iii) Through road movement should be supported and the norms for permissible road haulage and costs may be determined by the Ministry of Industrial Development.

6.29. With regard to the regions to be covered the Committee would recommend the inclusion of the Darjeeling district of West Bengal to the present list. The Committee would not recommend any change in the class of eligible units or the quantum of the subsidy. However, the subsidy should also cover coal and petroleum products but in this case should be calculated on the basis of the costs of transportation beyond the specified railhead only. In the case of Andaman and Nicobar Islands and Lakshadweep port charges should be included in the calculation of transport costs.

6.30. Apart from the transport subsidy, the Committee would recommend that more stock-yards and depots should be established in the remote regions in which the transport subsidy is applicable for the supply of raw materials by public sector organisations like the SAIL, STC, NSIC etc. The higher transport costs of material, stocks yards and depots in the remote regions can be absorbed by the national organisations. Till such time as more stock yards are established, the costs of transportation upto district headquarters should be absorbed in the national system. An assessment of the raw material requirements in the region should be prepared by the Ministry of Industries who should then pursue the matter with the concerned organisations for ensuring the necessary supplies.

6.31. Pricing systems for major industrial raw materials often involve a degree of freight equalisation. For example, cement, steel and fertilisers are sold at a uniform price at all railheads/stock yards in the country. Such systems automatically involve a subsidisation of raw materials supplied to remote areas. However, such systems are not in force in several other important commodities like coal, cotton, rubber, plastic, raw materials etc. When the commodities are produced in the private sector and are not subject to price and distribution controls, not much can be done through the pricing system. However, commodities produced or marketed largely in the public sector can be covered by uniform pricing systems. At present freight equalisation and uniform pricing systems are under attack as they can lead

to incorrect location decisions and unnecessary transportation. The Committee would not wish to comment on this general aspect. However, it would suggest that in any pricing system for commodities produced or marketed through the public sector, a degree of freight subsidisation on supplies to remote areas would be worthwhile.

6.32. With regard to a transport subsidy on the sale of output (i.e. on marketing) it is necessary to consider the need for such a subsidy for the different types of units mentioned in para 6.26 above. Major units based on local raw materials will have the advantage of raw material supplies. The environmentally related units will generally not be transport intensive and a subsidy on transport costs is of limited interest to them. Industries based on local demand will clearly not require any transport subsidy on movements out of the region. A subsidy on the transport costs of sending products out of the region may be of some relevance mainly for some small and village industries. In these cases the transport subsidy on the movement of output may be paid to the official organisations which offer marketing support to small and village industries. The principles underlying such a subsidy may be as follows:—

- (i) The destination of output may be deemed to be Delhi for eligible areas in J&K and Himachal Pradesh, Lucknow for eligible areas in U.P. and Calcutta for eligible areas in the north-east, Sikkim and West Bengal on the actual destination whichever is the nearer.
- (ii) For a certain distance upto the demand or actual destination no subsidy should be payable. This cut off distance would have to vary for different eligible areas and may be determined after closer study by the Ministry of Industrial Development. This same study should also determine the proportion of transport costs for movements beyond the cut off distance which would be subsidised.
- (iii) Through road movement should be supported and the norms for permissible road haulage and costs may be determined by the Ministry of Industrial Development.

6.33. Irrespective of a transport subsidy improving the transport infrastructure in the remote regions is a necessary pre-requisite for industrialisation. The development of new roads, bridges

or other transport facilities that shorten the distance to the national road and rail network may have a more significant impact on the costs of transport for a wide range of industries. It would also assist in the development of other sectors like horticulture, plantations and industry.

6.34. Many of the remote regions have perforce to be served by road transport. In this case the regular availability of trucking services may be more important than the cost. A scheme to subsidise trucking operations in these remote regions may be considered. This could take the form of loans on concessional terms for the purchase of trucks provided these trucks are based in these areas. The easy loans could be given to private operators or to state road transport corporations. The growth of locally based truck fleets would improve the availability of transport facilities, which may be of greater consequence particularly for small industries or low weight/high volume industries.

6.35. The high costs of transportation from the remote regions to major centres of demand and raw material supply can also be taken into account in the freight policy of the railways. The Committee would recommend that the freight rates from the remote regions as presently identified for the transport subsidy scheme, to the nearest metropolitan area should be set at a concessional level.

State Government Incentives

6.36. Apart from the incentives to industry offered by the Central Government, the State Governments also give a large number of concessions to new industrial units or expansion of existing units in the State. A list of these incentives as of 1980 is given in the Annexure 2 to this Chapter.

6.37. The important items on which State Governments offer concessions to industrial units are the payment of sales tax and octroi duty, the tariff charged for power and water supply and the cost of land/sheds in industrial estates. Jammu & Kashmir, West Bengal and Tamil Nadu also offer an outright investment subsidy.

6.38. The first point worth noting about the State Government concessions is that many of them apply across the board and do not have any built in preference for industrially backward areas. The States which have built in some preference for industrially backward areas, as defined by them, in various concessional schemes are listed below (the figures in brackets indicating

the total number of States/Union Territories offering that concession).

(i) Investment subsidy (5)	West Bengal, Andhra Pradesh, Gujarat.
(ii) Sales Tax concessions (20)	Gujarat, Madhya Pradesh, Maharashtra, Uttar Pradesh.
(iii) Octroi concessions (12)	Haryana, Madhya Pradesh
(iv) Power Tariff concessions (18)	Madhya Pradesh.
(v) Water Supply (5)	Karnataka, Maharashtra, Madhya Pradesh.
(vi) Subsidy on land/sheds (12).	Andhra Pradesh, Bihar, Gujarat, Maharashtra, Orissa, Uttar Pradesh.

Generally there does not appear to be much selectivity in the selection of eligible areas.

6.39. The definition of industrially backward area, used by the State is not connected in any way with the definition used for the central subsidy scheme for the scheme of concessional finance. Each State follows its own, criteria or judgment of the area in need of such concessions. The quantum of the concessions offered can be very substantial. The net effect of the State Government subsidies is that dispersal has not taken place and the entrepreneur has gone to the more developed parts of the State. In this sense the purpose of utilising the Central incentive to disperse industries has been blunted.

6.40. There is a certain escalation of incentives as each State offers concessions to match those offered by competing States. Industrially more developed States like Maharashtra, Gujarat and Tamil Nadu offer concessions which the less developed States cannot match. Moreover, the concessions offered by the more developed States are not restricted to the backward areas of that State as determined for the Central scheme. In Gujarat for instance the sales tax concession is

available in all areas located 25 kms. away from Ahmedabad and Baroda and 16 kms. away from Surat, Rajkot, Bhavnagar and Jamnagar. In Tamil Nadu there is no differentiation by area. Thus the substantial sales tax concessions offered by the industrially more developed States virtually negate the orientation of the Central Government schemes.

6.41. The objective of industrial dispersal policy is firstly the industrialisation of industrially backward States and secondly within the State the promotion of industries in the industrially backward areas. The Central schemes have been devised for this purpose. When States give across the board incentives this thrust is blunted. Entrepreneurship is limited and when incentives are available virtually across the board, the entrepreneurs naturally prefers to go to the more advanced States and also to the more advanced of the designated backward areas. The industrially backward States have difficulty in competing with the more advanced States in granting concessions and the urge to grab industry is working against the interest of these States.

6.42. The National Committee recognises that the State Governments will wish to promote industrial development in all areas within their territorial boundaries. The Committee would, however, suggest that the State Governments cannot plead for central scheme for industrialisation of backward areas if their own actions work against the orientation of these central schemes. Once a certain consensus on the concept and definition of industrially backward areas is reached, then the Central and State Governments must work together to promote industrial development in the indentified areas. Hence the State Government schemes must also reflect the same geographical orientation as the central schemes. They must build in a preference in their own schemes of concession for the areas identified as industrially backward for the central schemes.

ANNEXURE 6.1

Industrial Development
Disbursement of Central Transport Subsidy

(Rs. lakhs)

State	1976-77	1977-78	1978-79	1979-80	1980-81 (Upto 30-9-80)
1. Assam	1.82	1.76	0.14	..	..
2. Manipur .. .. .	..	0.30	..	..	..
3. Nagaland .. .. .	..	..	..	..	..
4. Tripura .. .. .	..	2.00	..	..	..
5. Himachal Pradesh .. .. .	..	..	0.46	..	0.44
6. Jammu & Kashmir .. .. .	..	..	1.55	..	12.23
7. Andaman & Nicobar Islands .. .. .	..	..	..	..	0.15
Total ..	1.82	4.06	2.16	..	12.82

Subsidies for Industrial Development given by the State Governments

(i) Power Subsidy

Most of the modern small scale industries are power operated, besides some of them are particularly higher power consuming such as metallurgical units, cold storage, ice factories etc. As

electricity consumption is one of the important elements of cost, a number of State Governments give subsidy to small scale units in the matter of electricity consumption. The pattern of power subsidy prevailing in different States are given below :—

State	Amount of subsidy/Rate charged from small scale units
1. Andhra Pradesh	Subsidy amounting to 12½% of the total electricity charges for five years from the date of commencement of production.
2. Assam	6 to 12 paise per unit of electricity charged for the first two years.
3. Bihar	18 paise per unit charged as the maximum rate.
4. Dadra and Nagar Haveli	Subsidy upto 9 paise per unit if the average unit rate exceeds 9 paise for a connected load upto 20 H.P.
5. Goa, Daman & Diu	Subsidy equal to the difference between the actual rate charged by the Electricity Department and first 9 paise for a connected load upto 20 H.P.
6. Gujarat	1. Difference between actual rate paid for the units consumed and 3 paise per unit subject to maximum of 12 paise per unit in case of S.S.I. unit is situated in an area with population of 20,000. This will be payable for a period of 10 years from the date of registration under the rules. 2. Difference between the actual rate paid for the units consumed and 6 paise per unit subject to maximum of 9 paise per unit in case of SSI units situated in an area with population between 20,001 and one lakh. This will be payable for a period of 7 years from the date of registration under the rules.
7. Jammu & Kashmir	Loans and advances for the acquisition of generating sets/diesel engine free of interest. 25% of the loan is treated as subsidy and the remaining 75% as interest free loans spread over to 7 years or 14 half yearly instalments from the date of receiving the loans.
8. Manipur	Subsidy of 9 years per unit, the subsidised rate being 31 paise per unit.
9. Madhya Pradesh	Subsidy amounting of 5 paise per unit in category 'A' districts, 7 paise per unit in category 'B' districts and 9 paise per unit in category 'C' district.
10. Meghalaya	Subsidy upto 9 paise on the average rate exceeding 9 paise per unit.
11. Nagaland	Electricity rate above 9 paise subsidised upto a load of 30 HP.
12. Orissa	Subsidy amounting to 12½% of the normal tariff charged to new units and the existing units for the expanded portion of their production.
13. Pondicherry	Subsidy to all new HT consumers industries set up on or after 1-4-75 at the following rates :— (a) for the first three years 66 2/3% of the actual rate, (b) for the fourth years 80% of the actual rate, (c) for the fifth year, 90% of the actual rate. (d) full rate after 5 years.
14. Punjab	Subsidy upto 25% of the prescribed rate of electricity given to power based industries for five years from the date of going into production.
15. Tamil Nadu	Reduction of power tariff by 15% in 56 backward talukas. (a) New SSI units establishing after 1-1-80 are eligible to get power tariff concession. (b) Subsidy is 30% of the first year, 20% in the second year and 10% in the third year. (c) Subsidy could be obtained on quarterly basis after payment of bills of the Electricity Board.
16. Uttar Pradesh	Subsidy upto a maximum of 9 paise per unit over and above the first 9 paise of the average unit rate for units having connected load 20 HP. The subsidy is applicable to new units upto a period of 5 years with effect from 1-4-1976.
17. West Bengal	Subsidy at the rate of 25% on electric power bill.

(ii) *Subsidy on land/sheds*

Many of the State Governments assist the

entrepreneurs by allotment of land/sheds at concessional/subsidised rates with some specific conditions as detailed below :—

Name of the State	Nature of concession/subsidy
1. Andhra Pradesh	A.P.I.F.C. provides built-up factory sheds in industrial estates at subsidised rent for the first 10 years, subsidy being higher in backward areas compared to developed areas.
2. Bihar	Cost of land and development subsidised to the extent of 50% in the backward areas and 25% in developed areas.
3. Goa, Daman and Diu	Rent of sheds in the industrial estates subsidised at the sliding rate of 50% of the economic rent during first and second year, 40% during the 3rd year and 25% during the 4th and 5th year.
4. Gujarat	Entrepreneurs taking large plots of land, concession is offered by GIDC in the premium price of land except where differential prices have been specified, on the following rates :
<i>Non-Backward Areas</i>	
For first two hectares (20,000 sq. m.)	No concession.
For land beyond two hectares and upto three hectares (30,000 Sq. m.)	5%
For land above 3 hectares and upto 4 hectares (40,000 Sq. m.)	7½%
For land areas in excess of 4 hectares	10%
<i>Backward Areas</i>	
Concession of land in excess of 3 acres (12,000 Sq. m.)	10%
5. Karnataka	Developed plots offered to the small scale units in backward areas at an annual interest rate of 8½% subject to a rebate of 1% for prompt payment.
6. Kerala	In the three rural industries project and backward districts of Alleppy, Trivandrum and Malapuram entrepreneurs provided loans upto 80% of the construction cost repayable in 20 years with interest at 6½% in the case of industrial cooperatives and 7% in other cases.
7. Maharashtra	Plots allotted on lease for 95 years and no rent charged for first two years. For the subsequent 3 years half the economic rent charged and full rent to be paid from the sixth year onwards.
8. Meghalaya	Interest free loans given to industries in selected areas upto a maximum of 50% of the building costs, repayable within 10 years starting from the third year of the date of sanction of the loan.
9. Nagaland	Built-up sheds provided at concessional rent in the industrial estate at Dimapur.
10. Orissa	Government land offered to entrepreneurs at one-third of the market rate in backward areas and half of the market rate in developed areas.
11. Rajasthan	Special facilities to Scheduled Castes/Scheduled Tribes members for allotment of plot/land in industrial areas at 50% of the normal rate.
12. Tamil Nadu	Developed plots (land) is made available on actual cost basis while the rental factory sheds in the Industrial Estate are made available on subsidised rent basis. In the case of Hire-Purchase Factory and Sheds the same at reasonable rate of interest. In respect of Developed Plots and Hire-Purchase Sheds the cost is paid in easy instalments.
In all the Industrial Estates water supply is at nominal rates which in some locations have an indirect subsidy in that the actual losses are not collected.	
13. Tripura	Built up factory accommodation provided to small scale units in the industrial estates on economic rent.
14. Uttar Pradesh	In certain specified backward districts and some industrial areas, entrepreneurs are charged for cost of land and development expenses on a 'No profit no loss basis'.

(iii) *Special facilities for units in industrial areas*

In addition to various facilities and concessions available to small scale industries in general, certain special facilities are provided to the small scale industries located in industrial areas. These are enumerated below :—

- (i) Testing facilities at nominal rates.
- (ii) Testing equipment subsidy to encourage units to instal testing equipment for production of quality products.

(iii) Free technical consultancy services.

(iv) Tooling and common workshop facilities at nominal charges.

(v) Preferential allotment of coal/coke for export oriented units.

(iv) *Water Subsidy*

Some States also subsidise water supply to the industries as detailed below :—

Name of the State	Nature of concessions
1. Karnataka;	Full exemption to new industrial units from payment of royalty on water drawn from a public source by mechanical contrivances for five years for units in districts falling in Group III and for three years in districts falling in Group II. The names of districts in various groups would be available from the State Government.
2. Maharashtra	Exemption to industries from payment of royalty on water from public sources for a period of ten years from the date of going into production in districts falling in Group IV as against 6 and 8 years respectively in districts placed in Group II and III.
3. Meghalaya	All industries in the State exempted from the payment of royalty charges for drawing or lifting water from public water sources in the State for a period of five years from the date of production.
4. Tamil Nadu	New industries pay a nominal amount of Rs. 200/— per annum as water subsidy irrespective of the quantity of water drawn for first six years.
5. Madhya Pradesh	Water rates for first five years are :— Rs. 1.25, Rs. 1.15 and Rs. 1.00 per thousand gallon for category 'A' and 'B' and 'C' districts respectively i.e. industries consuming a minimum of 5 lakh gallons of water per day, registered after 1-1-1971 given a subsidy of 15% on the rate of Rs. 1.59 or the rate worked out on no profit no loss basis whichever is less, for three years, from the date of going into production.

(v) *Investment Subsidy*

In addition to 15% capital subsidy given by the Central Government for industries in the selected backward districts/areas some of the

State Governments also give capital subsidy to industries in the designated backward areas. Details in respect of some of the States are given below :—

Name of the State	Nature of concession
1. Andhra Pradesh	10% subsidy on fixed capital cost subject to a ceiling of Rs. 10 lakhs to entrepreneurs setting up new industrial units and/or effecting substantial expansion of the existing units in backward areas designed by the State Government excluding those covered by the Central subsidy scheme and the Scheduled Tribal areas. 20% subsidy on the fixed capital cost subject to a ceiling of Rs. 15 lakhs in the Scheduled Tribal Areas. In such Tribal Areas where Central subsidy is admissible, the balance to make up the total of 20% is given by the State Government.
2. Gujarat	In addition to 15% cash subsidy given by Central Government for industries in the selected backward districts (i.e. Panch Mahals, Bhawruich and Surrender Nagar District) 5% cash subsidy is given in these districts for new SSI units coming up on or after 1-11-1977. This scheme is for 5 years from 1-11-1977.
3. Jammu & Kashmir	Outright cash subsidy amounting to 1/10th of fixed assets to entrepreneurs locating these units outside the districts of Jammu & Kashmir.
4. Rajasthan	1. 15% State Investment subsidy to SSI units in districts where 15% Central subsidy is not available excepting cities with population of over one lakh. 2. 10% resource based subsidy to Medium Scale Industries. 3. 15% State investment subsidy to all types of industries in Tribal Sub-Plan areas. 4. 15% State subsidy available to SSI units in remaining 10 backward districts.

Name of the State	Nature of concession
5. Tamil Nadu	(a) Identified 33 backward talukas are eligible for Government of India Capital Investment subsidy. (b) Identified 24 backward talukas are eligible for State Government Capital Investment Subsidy. (c) Bridge Loans made available even before creation of assets depending on project financing contemplated.
6. West Bengal	15% subsidy on fixed capital investment to new small scale units for existing units going for substantial expansion in the backward districts other than Purulia, Nadia, Midnapur, Calcutta, Howrah, Hooghly and Burdwan.

(vi) Equity participation by State Financial Corporations

Some of the State Financial Corporations also participate in equity. In Maharashtra 10 per cent investment on fixed assets is provided by the Regional Corporations, as seed money to industrial units. In Uttar Pradesh, Uttar Pradesh State Industrial Development Corporation collaborates with private entrepreneurs to the extent of 51 per cent of the equity capital in setting up joint ventures. Rajasthan State Industrial and Mineral

Development Corporation also likewise participates in equity capital with private entrepreneurs.

(vii) Octroi Duty/Concession

Octroi duty/Toll Tax is a tax levied by local bodies on goods/raw materials coming in and going out of the areas within their jurisdiction. In many States industrial units particularly small scale units are either exempted from this duty or given concessions in this regard as per the details given below :—

Name of the State	Nature of concessions
1. Dadra and Nagar Haveli	No octroi duty levied on incoming raw materials.
2. Goa, Daman and Diu	No octroi duty levied. ..
3. Haryana	All industrial units located outside the municipal limits in backward areas exempted from payment of octroi for a period of seven years from the date of commencement of production.
4. Jammu & Kashmir	Toll Tax on import of raw material and export of finished goods exempted from existing units upto 21-6-78 and for new units for 5 years from the date the unit comes into production.
5. Madhya Pradesh	Industrial units located in backward districts exempted from payment of octroi on plant and machinery, building materials, raw material for a period of five years from the date of their going into production.
6. Maharashtra	Raw Materials, capital equipment and building materials brought into the limits of local authorities by industrial units are exempted from payment of octroi duty for a period of ten years.
7. Uttar Pradesh	All new industrial units and the existing units going in for substantial expansion exempted from payment of octroi duty, Toll or Terminal Tax leviable on plant and machinery and building materials for a period of five years from the date of grant of letter of intent or licence or sales tax registration.
8. Rajasthan	Exemption from octroi duty granted from 1-4-68 to 31-3-1979 :— (i) On Plant and machinery whether new or old purchased by the industrial unit. (ii) On raw materials consumed by new industries or for additional production. (iii) On construction and fabricating material used in the new industrial units or for expansion of existing industrial units.
9. Punjab	Exemption from Octroi/Terminal tax allowed to new and expanding units at the existing Focal Points namely, Sahibzada Ajit Singh Nagar, Rajpura and Dhandrai Kalan for a period five years.
10. Orissa	No octroi is payable on machinery brought for setting up new industries and expansion and renovation of raw materials for new units on raw materials for an initial period of five years.
11. Kerala	No octroi duty levied.
12. Gujarat	Building materials, plants, machinery, stores, spare parts, raw materials, semi-finished goods, or any other articles brought within the limits of Gram or Nagar Panchayat not for sale but for use in the manufacture of any goods or erecting any factory by a new industry, is exempted from payment of Octroi for 7 years from the date of establishment of new industry or for 5 years from the date on which first lot of manufactured goods is produced by such industry, whichever is earlier.

Name of the State	Nature of concession
5. Tamil Nadu	(a) Identified 33 backward talukas are eligible for Government of India Capital Investment subsidy. (b) Identified 24 backward talukas are eligible for State Government Capital Investment Subsidy. (c) Bridge Loans made available even before creation of assets depending on project financing contemplated.
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6. Maharashtra	Raw Materials, capital equipment and building materials brought into the limits of local authorities by industrial units are exempted from payment of octroi duty for a period of ten years.
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(viii) Sales Tax Concession

Sales tax is an important tax levied by the State Government on the sale of a variety of goods including industrial raw materials, machinery,

etc. With a view to nullify/mitigate the burden of this tax on entrepreneurs setting up new industrial units or going in for expansion of the existing units, many State Governments grant a variety of concessions as detailed below :—

Name of the State	Nature of concession
1. Andhra Pradesh	Refund of sales tax in case of new and expanded industries on raw material machinery etc..
2. Assam	Exemption of raw materials from the levy of sales tax.
3. Arunachal Pradesh	All industrial enterprises exempted from payment of sales tax.
4. Bihar	Sales tax exemption on industrial raw materials.
5. Dadra and Nagar Haveli	Exemption to industrial units from payment of sales tax on raw material and capital goods imported into the territory and sale of finished goods outside the territory.
6. Goa, Daman and Diu	Exemption from paying sales tax on finished products at first point of sale for the existing units and exemption from payment of sales tax on raw materials and packing materials for new units for 6 years from the date of registration with the Sales Tax Department.
7. Gujarat	Sales tax exemption is given on machinery, raw materials, processing and packing materials to small scale industries established on or after 1-11-1977 outside the area of 24 km. of Ahmedabad, Vadodra, Municipal limit and 10 km. of Rajkot, Bhavnagar, Surat and Jamnagar Municipal limit and not situated in a town having more than one lakh population as per census of 1971. Or in option such SSI can avail benefit of Interest free sales tax loan ranging from 10% to 25% of the fixed investment amount. This benefit is available for five years from 1-11-1977.
8. Haryana	New Units given interest free sales tax loan subject to a maximum of 8% of capital investment every year for a period of seven years.
9. Himachal Pradesh	All new units exempted from sales tax for a period of five years.
10. Jammu & Kashmir	Small scale units exempted from payment of central sales tax on sales outside the State for a period of three years with effect from 21-6-76.
11. Karnataka	A cash refund allowed on sales tax paid for a period of five years from the date of commencement of production.
12. Madhya Pradesh	Concession in the form of sales tax subsidy or a 15 years interest free loan available to the industrial units on a graded scale in all the three categories of backward districts of a State for the period of five years instead of three years in developed districts.
13. Maharashtra	Newly started units or existing units undertaking expansion or diversification given sales tax loan amounting to 35% of the fixed assets for the first ten years from the date of production.
14. Meghalaya	A refund of actual sales tax allowed on raw materials and finished goods upto a maximum of 10% on the fixed investment of an industrial unit in a year for a period of five years from the date of establishment.
15. Orissa	New industrial units exempted from payment of sales tax on the purchase of raw materials during the first five years of their production.
16. Pondicherry	All New industries exempted from payment of sales tax for a period of five years from the date of their starting production. Besides reduction in Central Sales Tax to the extent of 50% allowed in the case of existing small scale industries, started prior to 6-11-1969 for a specified period.
17. Punjab	Refund of 50% of sales tax on raw materials and components and sale of finished products direct to the consumers for five years.

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13. Maharashtra	Newly started units or existing units undertaking expansion or diversification given sales tax loan amounting to 35% of the fixed assets for the first ten years from the date of production.
14. Meghalaya	A refund of actual sales tax allowed on raw materials and finished goods upto a maximum of 10% on the fixed investment of an industrial unit in a year for a period of five years from the date of establishment.
15. Orissa	New industrial units exempted from payment of sales tax on the purchase of raw materials during the first five years of their production.
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Name of the State	Nature of concession		
18. Rajasthan	<p>.. All machines purchased for setting up textile, ceramic, glass, cement, engineering, sugar and metal and mineral based industries exempted from sales tax. A nominal rate of 1% sales tax is leviable on raw materials sold to industries within Rajasthan.</p> <p>Interest free sales tax loan equal to the amount of sales tax paid by the unit upto 8% value of fixed assets, are provided to the industries.</p>
19. Tamil Nadu	<p>.. (a) All new units established after 1-4-1978 are eligible to get the loan under the scheme.</p> <p>(b) All units paying sales tax not less than Rs. 4,000/— per annum are eligible.</p> <p>(c) Ceiling limit is Rs. 1.25 lakhs of 8% of fixed assets.</p> <p>(d) Moratorium period for repayment.</p>
20. Uttar Pradesh	<p>.. Pradashiya Industrial and Investment Corporation of Uttar Pradesh grants interest free and unsecured loan equivalent to tax paid in five years in backward areas and three years in the case of developed areas.</p>

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7. STATISTICAL BASE FOR LOCAL PLANNING

The development of backward areas will require detailed local planning at the block level. In the case of the rural development programmes in agriculture and allied sectors and in village and cottage industries, this will involve an integration of area planning with the beneficiary-oriented approach. In the field of industrial development detailed action plans will be required at block and district level particularly in the planning of infrastructure and the promotion of small industries. These exercises in local planning cannot be undertaken in any effective manner if the data base for such planning is not built up. The Committee's discussions have revealed large gaps in the present system and the purpose of this chapter is to indicate the immediate improvements that need to be made.

7.2. In dealing with the deficiencies in the data base for local planning we must distinguish between basic data for the entire area or population that emerge from census reports and sample enquiries or reporting system and data on the progress of the various development schemes of the Government contained in departmental progress reports or evaluation studies. We are concerned here primarily with the first type of data system.

7.3 To start with, we consider certain items of economic data for which some sort of reporting or enquiry system exists and which can be processed to give block level data with some little effort. A minimum essential list of such items is set out in Annexure 7.1 which also indicates the present source of these data and the problems that arise in using them for block level planning. Some of the more important of these problems are dealt with in what follows.

7.4. At present a fairly comprehensive national system for statistical information relating to crop production has been built up. The main ingredients of this system and their usefulness for block level planning are dealt with below.

7.5. The foundation of the system of agricultural statistics rests on the land use reporting system which is based on complete enumeration in the land record in some states and on sample surveys in others. This system provides annual estimates of the net and gross area sown under various crops in different seasons, with separate figures for irrigated and unirrigated area. There are, however, certain lacunae which need to be

corrected. The coverage of horticultural crops and minor crops, which may be important in some areas needs to be improved. The classification of non-cropped areas needs further refinement and elaboration and categories like 'barren and uncultivable lands' have to be defined more precisely, since new developments in technology may well make many of these areas usable for production purposes. These refinements and elaboration in the classification of non-cropped area may be particularly important in backward areas.

7.6. Production estimates for principal crops are derived from a widespread system of crop cutting experiments to estimate yields. These figures when multiplied with the area figures give estimates of production. For the principal crops, the sampling scheme is such that generally valid estimates can be made at least down to the district level. From the point of view of local planning the principle deficiency in the system lies in the fact that the estimates as presently made may not be valid at the block level. It will, therefore, be necessary to supplement present arrangements by a special coverage at block level of important crops in that block. The need to get separate figures for yields in different varieties (e.g. high yielding vs. traditional) can also be taken into account.

7.7. The sample surveys for yield estimates presently exclude many agricultural activities like horticulture, animal husbandry, fisheries etc. These activities contribute a substantial proportion of agricultural income. The strategy for development of many types of backward areas also stresses the need to promote the subsidiary agricultural activities. Hence measures to obtain estimates of yields will be required for these activities at block level. Estimates based on actual observation of output as is the case with crop cutting experiments may be difficult in these sectors and we may have to be content with the enquiries based on recall. Yield estimates obtained for these sectors would have to be applied to the estimated production base measured in terms of area (for horticultural crops and field crops), number of animals (for animal husbandry), acreage under fish ponds (for inland fisheries), number of fishing boats (for marine fisheries) etc. Estimates of production base will have to come from improvements to land use reporting system from the livestock census and from the Economic Census, 1980.

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The development of backward areas will require detailed local planning at the block level. In the case of the rural development programmes in agriculture and allied sectors and in village and cottage industries, this will involve an integration of area planning with the beneficiary-oriented approach. In the field of industrial development detailed action plans will be required at block and district level particularly in the planning of infrastructure and the promotion of small industries. These exercises in local planning cannot be undertaken in any effective manner if the data base for such planning is not built up. The Committee's discussions have revealed large gaps in the present system and the purpose of this chapter is to indicate the immediate improvements that need to be made.

7.2. In dealing with the deficiencies in the data base for local planning we must distinguish between basic data for the entire area or population that emerge from census reports and sample enquiries or reporting system and data on the progress of the various development schemes of the Government contained in departmental progress reports or evaluation studies. We are concerned here primarily with the first type of data system.

7.3 To start with, we consider certain items of economic data for which some sort of reporting or enquiry system exists and which can be processed to give block level data with some little effort. A minimum essential list of such items is set out in Annexure 7.1 which also indicates the present source of these data and the problems that arise in using them for block level planning. Some of the more important of these problems are dealt with in what follows.

7.4. At present a fairly comprehensive national system for statistical information relating to crop production has been built up. The main ingredients of this system and their usefulness for block level planning are dealt with below.

7.5. The foundation of the system of agricultural statistics rests on the land use reporting system which is based on complete enumeration in the land record in some states and on sample surveys in others. This system provides annual estimates of the net and gross area sown under various crops in different seasons with separate figures for irrigated and unirrigated area. There are, however, certain lacunae which need to be

corrected. The coverage of horticultural crops and minor crops, which may be important in some areas needs to be improved. The classification of non-cropped areas needs further refinement and elaboration and categories like 'barren and uncultivable lands' have to be defined more precisely, since new developments in technology may well make many of these areas usable for production purposes. These refinements and elaboration in the classification of non-cropped area may be particularly important in backward areas.

7.6. Production estimates for principal crops are derived from a widespread system of crop cutting experiments to estimate yields. These figures when multiplied with the area figures give estimates of production. For the principal crops, the sampling scheme is such that generally valid estimates can be made at least down to the district level. From the point of view of local planning the principle deficiency in the system lies in the fact that the estimates as presently made may not be valid at the block level. It will, therefore, be necessary to supplement present arrangements by a special coverage at block level of important crops in that block. The need to get separate figures for yields in different varieties (e.g. high yielding vs. traditional) can also be taken into account.

7.7. The sample surveys for yield estimates presently exclude many agricultural activities like horticulture, animal husbandry, fisheries etc. These activities contribute a substantial proportion of agricultural income. The strategy for development of many types of backward areas also stresses the need to promote the subsidiary agricultural activities. Hence measures to obtain estimates of yields will be required for these activities at block level. Estimates based on actual observation of output as is the case with crop cutting experiments may be difficult in these sectors and we may have to be content with the enquiries based on recall. Yield estimates obtained for these sectors would have to be applied to the estimated production base measured in terms of area (for horticultural crops and field crops), number of animals (for animal husbandry), acreage under fish ponds (for inland fisheries), number of fishing boats (for marine fisheries) etc. Estimates of production base will have to come from improvements to land use reporting system from the livestock census and from the Economic Census, 1980.

7.8. The Agricultural Marketing Boards collect information on prices at which producers sell their goods in selected markets. However, these statistics may be useful only at state or district level and for purposes of local planning, supplemental data will have to be collected by the block authorities on local prices, nearest market prices etc. The same is true of the data collected on agricultural wages.

7.9. Information on the size distribution of holdings and on the cropping pattern in each size are available in the quinquennial Agricultural Census which is reported on an operational holdings basis. In non-land record states the Agricultural Census is also based on sample enquiries. Before 1971-72, this data was obtained through NSS surveys which could only provide valid estimates at State level. The NSS surveys which are based on the household as a unit as distinct from the operational holding will continue on a quinquennial basis and supplement the data thrown up by the Agricultural Census. For block level planning the data would have to come from the Agricultural Census.

7.10. There is a quinquennial census which provides comprehensive data on livestock, agricultural machinery, implements etc. These data can and should be processed at the block level to provide a base for animal husbandry statistics. At present these data are collected on a household basis but are not being tabulated in a manner which shows distribution of livestock assets, by household categories. This is an important element in local planning and should be covered in the tabulation programme.

7.11. There is an elaborate scheme of farm surveys which collects detailed data on cost structure, input use, etc. However, the sampling scheme for these surveys is really designed so as to obtain estimates which can be used for purposes of national policy. At the block level, a supplemental effort at analysing the technoeconomics of major agricultural activities in the block will have to be made by the district statistical system.

7.12 The national level system for agricultural statistics has certain ingredients over and above the ones listed above, e.g. the regular reports on the markets for major agricultural commodities at the national level and the decennial debt investment agency. The Committee has not commented on these ingredients since they are not at present usable for purposes of block or project level planning. The Committee has concentrated on the availability of data for purposes of local planning and the improvements that are

essential for this. The Committee has not addressed itself in detail to the problems of improvements in the system at the national level. Nevertheless, it is clear that improvements in the system at block or project level will inevitably lead to improvements in the quality of data at the national level.

7.13. The statistical system for agricultural activities reveals one disquieting but common feature in our approach to data. In many cases the required data are available in the original schedule but cannot be retrieved easily because they have not been covered in the tabulation programme. For instance one may require data on how many households have only one animal since this is relevant for animal husbandry programme. As pointed out earlier, this information is available in the livestock census, but cannot be retrieved because it is not covered in the tabulation programme. Similarly the cost of cultivation studies collect a wealth of data on farming operations but much of it cannot be used because only the cost data for the particular crop for which the sample was drawn are tabulated. Planning cannot become a victim of tabulation programmes. Unit level information must be stored in a readily retrievable form so that the schedules are easily reprocessed to obtain information in a different format if required. The primary data must be stored in two sets of cards/discs/tape decks. One of these should be accessible to all Central and State Government departments and organisations, research workers and academicians so that they can reprocess the primary data in the manner required for their analysis. The Committee understands that this has been accepted for NSS data. The principle should be extended to all data sources.

7.14. The data system for industrial statistics is fairly developed for industrial units, which fall within the purview of the Factories Act which applies to all factories employing 10 or more workers using power or 20 or more workers, not using power which are covered under the Annual Survey of Industries. Units employing 50 or more workers and using power or 100 and more workers and not using power are covered on a census basis. Other factory units are covered on a sample basis. Separately, the Small Industries Development Organisation has a system for collecting data for all small-scale units registered with the Directorate of Industries. These include some units which fall within the purview of the Factory Act and hence are covered under the ASI. At the same time unregistered small scale units are excluded. Thus, the results of the ASI and the SIDO surveys cannot be 'added up' in any meaningful way both because of the overlap and because of the

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exclusion. Moreover, unorganised enterprises (outside the purview of the Factories Act and the Directorate of Industries) and household industries are not covered on any regular basis and sporadic information is available from NSS surveys. The type of information available varies, for large and medium industries, detailed data on production, input use etc. are available on an annual basis although with a lag, for smaller units the data available is more aggregative, for a part of the unorganised sector. NSS surveys provide estimates for a few important magnitudes; for household units and very small enterprises very little is available beyond what is collected as part of the decennial census. Thus, in the industrial sector comprehensive data is not available even for the number of units let alone for magnitudes like production, input use and employment. Moreover, the system of enquiry lacks coherence in that there is an overlap between some systems and a total exclusion of certain sectors.

7.15. The starting point for any reasonable system of data collection in the industrial sector must be a reliable estimate of the number of producing units classified by group, location and size. This gives a classified list of units for sampling purposes and corresponds to the land record based area estimates in the data system for agriculture. Such a sample frame can be provided by the Factory Act records and the Economic Census, 1980 which was conducted along with the Population Census. Pending the processing of the 1980 data, the lists prepared by the Economic Census, 1977 can be used. This census, unlike the 1980 census excluded purely own-account enterprises. These excluded enterprises which will be mainly in artisan sector. For planning purposes these artisan units will be covered under the project approach outlined in the report on Village & Cottage Industries submitted by the NCDBA (Ref. para 4.19 of the Report). The data from the Factory Act Records and Economic Censuses of 1977 and 1980 can be tabulated block-wise. This should be done and the lists and estimates emerging from this should be compared with the lists maintained by the DIC and by local offices of bodies like the Handloom Directorate, Coir Board etc., so as to construct a complete sample frame.

7.16. The second element in the data system should be the regular collection of data on magnitude like production, raw material use, employment, marketing, credit etc. The Committee is not concerning itself with the methods that should be used at national or the State level to derive valid estimates. What concerns the Committee is the data required for local planning

at block and district level. The Committee has placed a great deal of responsibility on the DIC for supporting small industries in the region (para 6.26 of the Report on Industrial Organisation, NCDBA). It has also recommended a project approach to village industry development (para 4.19 of Report on Village & Cottage Industries). The discharge of these responsibilities will require data on raw material requirements, marketing problems, labour requirements etc. of industrial units in the area. The Committee would recommend that the DIC and the project group for village industries should carry out regular surveys of units in their area to collect data on these aspects. The lists prepared from the block/district level tabulations of the Factory Act data and the Economic Census of 1977 and 1980 and suitably updated on the basis of local knowledge can form the sample frame for this purpose. The surveys can concentrate on the major sectors in the block and district. This can be organised on a census basis if the number of units is not very large and on a sample basis otherwise.

7.17. The third element in the data system should be a scheme of techno-economic studies of household and small units. The responsibility for organising this must rest with the Economic Adviser in SIDO as far as small scale industries are concerned and the KVIC and the concerned Directorate for Village and Cottage Industries. However, the local agencies like the DIC and the project group for village industries must also undertake studies of this nature for a few sectors of importance within this area. Management institutes and other academic bodies must be used in a systematic way for this purpose also. These studies would be the counterpart of the cost of cultivation studies in agriculture.

7.18. The data system for the services sector is particularly weak except where the service activity is in the public sector. Generally for private sector construction, trade, transport, social services and business services even basic information on the number of units or employment is not available except in the Population Census. These enterprises will also be covered in the Economic Census and it would be desirable to institute a same system of sample surveys and techno-economic studies for these sectors as has been suggested above for small and village industries.

7.19. The data system for local planning described above can be integrated at some stage with the household cards prepared as part of the Integrated Rural Development Programme. These household cards will contain much of the data

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required for the census/sample enquiries. It would be desirable to ensure that as and when the household card system in a project area is complete, the relevant data are transmitted to the agencies responsible for the census/sample enquiries.

7.20. The data system suggested above rests on four census : the Population Census, the Agricultural Census, the Livestock Census and the Economic Census. These provide the bedrock on which the rest of the system is constructed. It is essential that the concepts and definitions used in these censuses are consistent and stable from census to census. One difficulty that has crept in is the lack of comparability over different censuses of items like employment. The Committee has drawn attention to this in its Report on Village and Cottage Industries (para 2.18 of Report on Village and Cottage Industries, NCDDBA). This makes it difficult to assess changes over time which is critical for purpose of development planning. Hence conceptual changes should be avoided and, if they are absolutely necessary, data items should be canvassed both on the old and new basis for a sufficiently large sample so as to provide 'correction, factors' which would allow a comparison with earlier census data.

7.21 The enquiries based on sampling will have some built in limitations on the extent of disaggregation by area. But there is no such restriction on census based enquiries. Yet, in several cases, block level tabulations are not available even for these. It is necessary that the tabulation plans for all census based enquiries be modified to provide block level tables.

7.22 The data system suggested above will require a great deal of field work. Much of the staff required for this is already available. A large number of States have a Statistical Assistant at taluk/block level. This assistant is known by different designations, Statistical Assistant, Progress Assistant, Statistical Inspector, Field Assistant, Assistant Development Officer (Statistics) etc. Besides him there are inspection officers and extension officers in the industrial support system and VLWs and revenue staff in the agricultural support system. The State level organisations like the Statistical Bureau also have their own statistical staff. At present much of the time of this State Statistical staff is used to undertake a survey on a matching sample basis with the NSS. In a sense they are duplicating the work done by the NSS. By now the size of the central sample in the NSS is large enough to provide valid estimates at State or sub-region level and there is no real need for a matching State Sample. The State

Governments resources are better utilised to fill in the gaps in the data system for local planning.

7.23 Thus the staff required for field work is available. However, all of this staff is not under unified control. What is required for the effective use of this staff is coordination. This can and should be done by the District Statistical Officer who is in position, at present, in most districts. The work to be done has to be assigned to the different field workers on the basis of an agreed work plan. The basis for this must be a plan which specifies the items of data to be collected and the proposed coverage of enterprises or households in the block and the districts. This must be done by the district planning authority, the project authority, the DIC and other planning agencies in consultation with the District Statistical Officer. The field work requirement can be derived from this plan and assigned to the different field workers by the District Statistical Officer in consultation with concerned controlling officers. Each field worker should have a work chart specifying his responsibilities clearly. The District Statistical Officer must also provide training and technical guidance to the field workers.

7.24 The responsibilities cast on the DSO are in line with the original intention which according to the Committee on the National Statistical System was that they should be entrusted with the task of "collection, compilation and timely submission of primary and secondary data at the district level, bringing about improvement in the quality of statistical information generated as by products of administration at the district level, improving the coverage of primary data, training of staff working in different district level offices who mainly handle statistical reports and returns, supervising the work of progress Assistants appointed in the blocks for community development statistics and assisting the Collector and other district level authorities in providing statistical material, needed for plan formulation and implementation". (Report of the Committee on the National Statistical System para 2.43). Hence the suggestions of this Committee do no more than spell out these intentions in more concrete terms.

7.25 The improvements in the statistics recommended in this chapter will require the processing of much larger volume of information at block and district level. Data processing capabilities will have to be greatly enhanced. Steps to do this have been taken at the national level in some States. It is also necessary to improve data processing capabilities at district and block level by providing an ample supply of computing assistants, calculators and unit recording machines.

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A large amount of primary data will be collected at block and district level. The volume of this data is such that mechanical devices like units recording machines can be fully utilised at local level. The decentralisation of processing capabilities is very important if data is to be made available in good time. Moreover, the ready availability of processing facilities at local level will encourage a more constructive use of statistical data in local planning. Hence there should be a data processing set up attached to the D.S.O.

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responsibilities for primary data collection. What has been suggested is a modification of the procedures of enquiry in order to yield the data required for local planning. The planning agencies at block/project/district level will have to obtain data from the various agencies involved and put them together in the form of a statistical abstract. This abstract should cover not just the general economic data referred to above but also the statistics generated as part of the administrative process. In many States this is being done at the district level. The National Committee would recommend the same should be done at block and project level.

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Check-list for Block Level Data

S. No.	Data	Source	Remarks
Demographic			
1.1	No. of towns and village size-wise	Population Census	There should be no difficulty in supplying these data at block level for 1.1 to 1.4. For 1.5 special exercise based on age-distribution and migration data and direct enquiries will be necessary.
1.2	Population by age-groups, sex and residence.		
1.3	Literacy and educational status		
1.4	Scheduled Tribes/Scheduled Castes population by tribe caste by age group sex and residence.		
1.5	Fertility and mortality indicators.		
Agriculture			
2.1	Land Utilisation	Department of Land Records/ Revenue	Refinements in sub-classification of non-cropped area necessary.
2.2	Soil Categorisation	Department of Agriculture.	Uniform systems classification are necessary. There are gaps which have to be covered.
2.3	Area affected by salinity, drought, chronic floods as per definition.	Department of Agriculture/Irrigation.	Mapping is incomplete.
2.4	Sizewise distribution of holdings (No. and area).	Agricultural Census.	Block level tabulation would have to be undertaken.
2.5	Irrigated area by source and size of holding.	Department of Irrigation/ Land Records/Agricultural Census.	Data from different sources would have to be reconciled through Agricultural Census. A uniform definition of irrigated area and class of irrigation is necessary.
2.6	Cropping pattern separately irrigated and unirrigated HYV/improved and traditional.	Department of Land Records/ Revenue/Department of Agriculture/Agricultural Census.	In non-land record States sample surveys would have to be designed to give valid estimates at block level.
2.7	Crop-wise yield and production.	Department of Agriculture/Statistics.	Yield estimates at block level are generally not available and crop cutting experiments would have to be extended for this purpose.
2.8	Distribution of HYV/improved seeds fertilizers, pesticides.	Department of Agriculture.	Block level programmes suitably monitored will be the best source.
2.9	Area covered and production under horticulture crops	Department of Agriculture/ Horticulture.	Horticulture crops are not fully covered under the reporting system and an appropriate system would have to be introduced in blocks where they are important.
3 Activities allied to Agriculture			
3.1 Animal husbandry			
(a)	No. of animal and birds by type and age.	Department of Animal Husbandry/Livestock Census.	Livestock Census data would have to be tabulated at block level.
(b)	Average yield per animal.	Department of Animal Husbandry.	This would have to be collected by survey.
(c)	Collection. Procuring, Marketing	District Cooperative/Departments of Animal Husbandry and Dairy Department.	Block level monitoring necessary.
3.2 Fisheries			
(a)	Inland Fisheries, Area available, production.	Department of Fisheries	Would have to be based on specific surveys and on a block level tabulation of data from the Economic Census 1980.
(b)	Brackish water fisheries, area available, production.	Department of Fisheries	
(c)	Marine Fisheries No. of boats by type harbours catch landed by type.	Do.	

Check-list for Block Level Data

S. No.	Data	Source	Remarks
Demographic			
1.1	No. of towns and village size-wise	Population Census	There should be no difficulty in supplying these data at block level for 1.1 to 1.4. For 1.5 special exercise based on age-distribution and migration data and direct enquiries will be necessary.
1.2	Population by age-groups, sex and residence.		
1.3	Literacy and educational status		
1.4	Scheduled Tribes/Scheduled Castes population by tribe caste by age group sex and residence.		
1.5	Fertility and mortality indicators.		
Agriculture			
2.1	Land Utilisation	Department of Land Records/ Revenue	Refinements in sub-classification of non-cropped area necessary.
2.2	Soil Categorisation	Department of Agriculture.	Uniform systems classification are necessary. There are gaps which have to be covered.
2.3	Area affected by salinity, drought, chronic floods as per definition.	Department of Agriculture/Irrigation.	Mapping is incomplete.
2.4	Sizewise distribution of holdings (No. and area).	Agricultural Census.	Block level tabulation would have to be undertaken.
2.5	Irrigated area by source and size of holding.	Department of Irrigation/ Land Records/Agricultural Census.	Data from different sources would have to be reconciled through Agricultural Census. A uniform definition of irrigated area and class of irrigation is necessary.
2.6	Cropping pattern separately irrigated and unirrigated HYV/improved and traditional.	Department of Land Records/ Revenue/Department of Agriculture/Agricultural Census.	In non-land record States sample surveys would have to be designed to give valid estimates at block level.
2.7	Crop-wise yield and production.	Department of Agriculture/Statistics.	Yield estimates at block level are generally not available and crop cutting experiments would have to be extended for this purpose.
2.8	Distribution of HYV/improved seeds fertilizers, pesticides.	Department of Agriculture.	Block level programmes suitably monitored will be the best source.
2.9	Area covered and production under horticulture crops	Department of Agriculture/ Horticulture.	Horticulture crops are not fully covered under the reporting system and an appropriate system would have to be introduced in blocks where they are important.
3 Activities allied to Agriculture			
3.1 Animal husbandry			
(a)	No. of animal and birds by type and age.	Department of Animal Husbandry/Livestock Census.	Livestock Census data would have to be tabulated at block level.
(b)	Average yield per animal.	Department of Animal Husbandry.	This would have to be collected by survey.
(c)	Collection. Procuring, Marketing	District Cooperative/Departments of Animal Husbandry and Dairy Department.	Block level monitoring necessary.
3.2 Fisheries			
(a)	Inland Fisheries, Area available, production.	Department of Fisheries	Would have to be based on specific surveys and on a block level tabulation of data from the Economic Census 1980.
(b)	Brackish water fisheries, area available, production.	Department of Fisheries	
(c)	Marine Fisheries No. of boats by type harbours catch landed by type.	Do.	

S.No.	Data	Source	Remarks
3.3	Sericulture		
	(a) Area under mulberry tasar, muga, sericulture.	Department of Industries/Central Silk Board.	} Reporting system would have to be introduced whenever intensive development is undertaken.
	(b) Production	Do.	
	(c) Procurement	Do.	
3.4	Forestry		
	(a) Forest area by type.	Department of Forests.	} Problem of coverage where exclusive area outside the reserved/protected category. For blocks having large forest area, pre-investments survey maps can be used.
	(b) Quality and value of forest production.	Department of Forests.	
4	Village and Cottage Industries		
4.1	No. of artisans and cottage units by type.	Economic Census.	Not available at present. Would have to be compiled from 1980 Economic Census.
4.2	No. of artisans and cottage units within the ambit of covering organisations.	KVIC/Department of Industries	
4.3	Production, inputs and employment.	Do.	Data are available only for units within the ambit of covering organisations. Sample Surveys necessary.
5	Small and Medium and Large Units.		
5.1	No. of units, industries and size-wise	Directorate of Industries/Annual Survey of Industries/Economic Census.	Coverage, complete for factories, for non-factories coverage depends on registration with Directorate of Industries. Overlap in coverage by SSI by Directorate of Industries and ASI.
5.2	Production, input use and employment	ASI/Directorate of Industries	Coverage of factories by ASI, non-factories would have to be covered by Sample survey.
5.3	Industrial Estate/area, No. of sheds built, sheds occupied, employment.	Directorate of Industries	
5.4	Distribution of raw materials, marketing support to SSI.	Directorates of Industries.	
6	Banking and Credit		
6.1	No. of credit Co-operatives and purpose-wise disbursement.	Registrar of Cooperatives	There is a Reporting System to RBI.
6.2	No. of Commercial Branches and purpose-wise disbursement.	District Credit Consultative Committee.	Under the lead bank scheme data is reported to District Credit Committee.
6.3	No. of State Government financial institutions and purpose-wise disbursement.	Branch Offices of concerned corporations.	For some institutions like SFC there is a reporting system to national bodies like IDBI.
7	Infrastructure		
7.1	Power		
	(a) No. of towns and villages electrified.	} State Electricity Board.	
	(b) No. of pumpsets energised.		
	(c) No. of connections and consumption by type.		
7.2	Roads		
	(a) Length of roads by type.	P.W.D.	} Block level survey will be necessary for specific purpose.
	(b) Distribution of villages according to distance from surface roads.	Block authority.	
7.3	Railways		
	(a) Length of railway kms. of gauge.	} Divisional Superintendent of Railways.	
	(b) No. of railway stations.		
	(c) Distribution of towns by district from nearest railhead.	Block authority.	

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Data	Source	Remarks
7.4 Communications		
(a) Distribution of villages by distance from nearest Post Offices.	} Posts and Telegraphs Department.	
(b) No. of telephone connections, rural and urban.		
7.5 Marketing		
(a) No. of regulated markets and arrivals of important commodities.	Market Department of Agricultural Marketing.	
(b) No. of Official procurement/purchase centres for crops/milk/other agricultural products/village and cottage industry products.	Block Authority.	Local enquiry according to requirements.
(c) Storage capacity	State Ware-housing Corporations.	At present maintaining records only of their own capacity. Should maintain records of other storage as well.
8 Labour		
8.1 Distribution of workers by activity	Population Census.	Available in Census Abstract.
8.2 Distribution of workers by occupation	Do.	
8.3 Employment in the organised sector by type of establishment.	Directorate of Employment and Training.	Data based on Census can be tabulated at block level.
8.4 Technical Manpower		
(a) Stock of technically qualified manpower.	Census tabulation.	
(b) Intake and outturn of technically qualified manpower.	D.E.& T.	
9 Social Services		
9.1 Education		
(a) No. of institutions and enrolment by type of institutions.	District Office Department of Education.	
(b) Outturn by institutions.	Department of Education.	
9.2 Public Health		
(a) No. of hospitals and dispensaries.	District Office Department of Public Health.	
(b) Distribution of village by distance from nearest hospitals/dispensary.	Local Enquiry.	
(c) No. of private practitioners.		

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8. FOCAL POINT—AN AREA-CUM-BENEFICIARY ORIENTED APPROACH

Introduction

The concept of the development of backward areas is to exploit the potential for development of the backward areas in full and in the process ensure growth with social justice for the entire population of the area.

8.2 The Committee has already identified six types of fundamental backwardness which stand in the way of full exploitation of the potential of the backward areas. The Committee has since submitted its reports on Hill Areas, Tribal Areas, Drought Prone Areas and Desert Areas, Coastal Saline Areas and Chronic Flood affected Areas. In these reports the Committee has drawn attention to the effect of the fundamental backwardness on growth and suggested various measures for ensuring comprehensive development with social justice.

8.3 The Committee in its report on 'Organisation of Administrative and Financial Structures for backward Area Development' has discussed at considerable length, the concept and approach towards development of backward areas. Broadly speaking, the focus of the approach is at the local village and community level. The 'Block' has been recommended as the unit for planning and development. The concept of planning and development aims at an integrated approach, with special emphasis on the least advantaged. The very approach of integrated area development pre-supposes that the programme would have to be both area and beneficiary oriented. Family would obviously be the basic human unit for planning and development.

8.4 Integrated area development refers to a method of action, implying close coordination of policy and of action at all levels. While the ultimate aim is to improve the social and economic conditions of the individuals, family being the basic unit for development, there are large number of programmes which can be taken up only on an area basis. Modern agriculture, water control, land shaping, pest control, rural communications, social services, development of infrastructure, etc., have all to be area based.

8.5 The Bloc has been recommended as the minimum unit for planning and development. A Block normally consists of a population of 100,000 or roughly 20,000 families. Rural development programmes were initially envisaged as covering irrigation, introduction of better

agricultural products later the community development programme tried a community approach to cover all rural development. Then came the articulation of area specific and target group programmes. But even those were directed at groups in general. It was not recognised that there are many variations in needs and capacities of persons inside every group. Recently, attempts have been made to identify individual families and to see, as per a phased programme, how to meet their particular needs and possibilities for growth.

8.6 Experience shows that two acres of irrigated land can put a family over the poverty line, which in today's terms would be about Rs. 400 a month in rural areas. Likewise, two acres of land used to grow fodder can maintain a cross breed cow that would yield 4,000 litres or more of milk per lactation. In poultry, a family having five birds can increase its income by Rs. 600 a year. One acre of brackish water can earn enough income to a fisherman to put his family above the poverty line. It is thus possible to draw up programmes and design specific projects suited to the needs of 14 million small farmers, 35 million marginal farmers and hopefully for 20 million families of landless agricultural labourers. It is also important to upgrade the low skills presently available in rural areas.

8.7 The Committee has pointed out in its report on "Village and Cottage Industries" that a rapid change of equipment, technology and training of the millions of artisans in the field to enable them to utilise the technology requires a vast hierarchy of field level experts supported by a pyramid of higher expertise and a large number of training units and an appropriate organisation. The production units in this field are generally family units with a spare interspersal of a few master craftsmen engaging labour from outside the family. These units are scattered all over the country in the villages. The basic requirement of a family units is getting raw materials in small quantities at a fair price throughout the year, getting technical guidance in individual technology, maintenance of equipment at fair rates, prompt marketing of inputs and the availability of the necessary credit. Similarly, in other fields of development, the villager requires not only identification of the programme best suited to his needs and the potential of the area but technical guidance, inputs of all types, marketing support etc., etc. What is, therefore, wanted is a covering organisation which can perform these functions for the

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individual family, keeping in focus the integrated area development approach. Such a covering organisation has also necessarily to be economical since a highly subsidised organisation will be inconsistent with the objective of an economic approach. Again, whatever be the structure, it has to be as close to the beneficiaries as possible and cannot be attempted from a distance. The Committee is aware of the fact that it has recommended the concept of an integrated area development authority to provide a coordinated approach to all the activities in the project area. At the same time, it must be remembered that this authority can provide the necessary guidance and expertise only at the level of the block and cannot go in an intensive manner below the Block Level. On the other hand, the focus of the responsibility for planning and implementation of programmes has to be brought to levels which are closer to the people.

8.8 Punjab has experimented with an approach which it calls 'a focal point' approach. But the emphasis in the Punjab experiment is, by and large, restricted to providing the necessary infrastructure in the shape of banking services, grain godowns, market place and placement of the technical field personnel below the Block level at a suitable centre, preferably in a reasonably large village to serve a population of roughly 20,000.

8.9 The programme was taken up in the State during 1977-78 and covered initially 117 cluster of villages in all the Blocks. One of the villages in the cluster is being developed as a focal point. Each focal point is intended to provide a package of services for the villages within the cluster and ultimately it would serve 20-25 villages. The operational strategy behind this programme is the development of suitable growth centres in a manner that farmers and artisans meet their production requisites, marketing and banking needs within five km. of their living places. Infrastructure facilities like Agro-Service Centre, Cooperative Bank Branch, retain outlet for distribution of consumer articles and agricultural inputs, marketing yard, diesel/petrol pump, post office, medical dispensary and veterinary hospital, community centre-cum-library etc., are proposed to be provided at each focal point. The focal point is also used as a base programme like lining of canal water courses, laying of underground water channels, and reclamation, soil conservation and setting up of dairy, piggery and poultry units and the development of agro-based industries to ensure the achievement of targets of agricultural production raising the income levels and generating full employment in the rural areas. Special efforts are being made to provide full and gainful employment to Scheduled Castes and

other economically weaker sections like agricultural labourers, village artisans and other unemployed educated persons. An evaluation of the progress made, as a result of the introduction of the focal point approach, has shown that during 1977-78 the yield of wheat in these villages increased by 14% as against the State increase of 4.6%. Area under PR-106 increased in villages by 45.50% as against 20.25% at the State level. The yield of paddy increased to 32 quintals/hectare in villages as against State average of 22 quintals. The average yield of cotton increased to 425 kgs. of lint per hectare from 345 kgs. The area under groundnut spraying in villages increased from 1 lakh to 2 lakh hectares. The consumption of fertilizers in the cluster villages increased by 55.6 per cent during 1977-78 as compared to 1976-77 and State's average increase of 24 per cent during 1977-78.

8.10 A recent study* on the impact of focal points on marketing indicates that the size of the market yard was inadequate in half of the 16 focal points studied. The average distance of the nearest village from the focal point was 1.9 km. and of the most distant, 7.7 kms. The percentage of produce sold by the selected farmers at the focal points (in preference to the main market) was as follows :—

	Wheat		Paddy
	1978-79	1979-80	1978-79
Focal Point	65	68	48
Main Market	28	23	39
Sub-Yard	7	9	13

The main reason advanced for preferring the Focal Point was lower transportation cost and the saving in time. In some cases higher price and quick payment was also mentioned.

8.11 An experiment of similar type, but restricted only to the beneficiary oriented approach, was tried in the Somangalam Project in Tamil Nadu. A population comprising families in a group of villages in taluka were investigated in detail. The present occupation of every member of the family and his or her earning was tabulated in a family chart and acted as the base and the benchmark for planning the development of a family and the economic growth of the family respectively. At the time the Somangalam Project was started, there were only a few ideas about development such as supply of milch cattle, better agriculture, selective cash crops like flowers, poultry rearing and so on. Each member of the family was asked what he would like to be given the technical support and the financial

*Impact of focal points on the marketing of farm produce by Dr. Balwinder Singh. PAV, Ludhiana in Kurukshetra Vol. XXIV No. 14.

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support. Based on their choice the various schemes were tied up to the members and the families. A synoptic write up explaining the methodology of the programmes is given at Annexure 8. The families were grouped into those with less than Rs. 100 per month income at one end and at the other end those with more than Rs. 400 per month. In between were three other groups on the basis of their income. Over a period of three years, the analysis shows as in the table at Annexure-I that at current prices the status of income of the family groups changed remarkably from a skewness towards the lower income groups at the start to a skewness towards the higher income groups at the end of the three years. Even at constant prices, it will be noticed that the initial skewness towards poverty was substantially removed under this programme. Taking this as a guide, Tamil Nadu tried a more detailed exercise in the Uttar Merur block in the district of Chingleput. Here, all the families below the poverty line were enumerated within a period of two months by the existing staff in the format utilised for the Somangalam Project. Nearly 80 per cent of the families in Uttar Merur were found to be below the poverty line. Then the strategy of Somangalam was repeated for each of these families and some programme or the other was identified for each member of these poor families. It was estimated at the beginning that if the programme was successful, there will be substantial improvement in the economy of the poorer families over a period of three years.

8.12 An Evaluation of these two experiments indicates that there has been little link up between the main occupation in the Block, its potential and the types of programmes that were provided for the families. Programmes which were acceptable to the people were limited by numbers whereas other programmes which did not have ready acceptance had large opportunities. Further, all the important needs of the families did not receive any attention. For instance, in Utter Merur where handloom industry is an important industry, it did not receive the required attention.

8.13 The two experiments referred to earlier are both partial in their approach. The Punjab focal point scheme concentrates attention on the provision of infrastructure at the focal point. The Tamil Nadu experiments, on the other hand, focus attention on the beneficiary oriented measures. Thus, the link up between infrastructure and area planning and family development is weak in both approaches. In the case of Punjab the types of infrastructure provided would not really take into account the different needs of small and marginal farmers, landless agricultural labourers, artisans etc. In Tamil Nadu, the focus was on programmes which were acceptable to

the families rather than on the programmes with potential for which infrastructure could be made available. What is required is a closer link between infrastructure development and programmes which are feasible in the area and further between these programmes and the capacity of the families to absorb the technology. It is this tie up between the family-wise approach and the area approach that has to be established at the focal points.

8.14 Such an approach, as mentioned earlier, has to be as close to the beneficiaries as possible. The Block with a population of one hundred thousand becomes too large and too remote from families to be served. On the other hand, a village by itself is too small, incapable of bearing the weight of expertise or of varied facilities needed. Obviously, there has to be another appropriate level where the minimum essential services required can be easily provided. The appropriate level has necessarily to be a cluster of villages, with a population of 15,000—20,000 (three to four thousand families a kin to the Mandal Panchayat approach recommended by the Asoka Mehta Committee on Panchayat Raj) where plans would be implemented and family-wise contacts built up.

8.15 It is in this context that the Committee is recommending a focal point approach to take care of both the beneficiary and the area oriented needs.

8.16 The selection of the village as a focal point will have to be done very carefully. Broadly speaking, the Committee would suggest that the village so selected should be a reasonably big village, it should be centrally located geographically and its activities should cover as far as possible, within a radius of 5 kms.

8.17 The Committee considers that each focal point should have certain rural infrastructure facilities, depending on the potential identified, both for agricultural and non-agricultural activities. The focal point should also provide the necessary economic and social services to the rural community. In the first stage, a focal point should have banking and credit facilities, agro-service centres, a retail outlet for essential commodities and agricultural inputs, a marketing yard, diesel and petrol pump where necessary a Post Office and eventually the telephone facilities, hospital, school etc. Later, according to the needs of the area, more infrastructure facilities may have to be provided like setting up of cold storage, agro-processing facilities etc. etc. Of course, the facilities would vary from area to area, depending on the local needs and conditions. Integrated rural development programmes should be implemented through the establishment and development of focal points (growth

support. Based on their choice the various schemes were tied up to the members and the families. A synoptic write up explaining the methodology of the programmes is given at Annexure 8. The families were grouped into those with less than Rs. 100 per month income at one end and at the other end those with more than Rs. 400 per month. In between were three other groups on the basis of their income. Over a period of three years, the analysis shows as in the table at Annexure-I that at current prices the status of income of the family groups changed remarkably from a skewness towards the lower income groups at the start to a skewness towards the higher income groups at the end of the three years. Even at constant prices, it will be noticed that the initial skewness towards poverty was substantially removed under this programme. Taking this as a guide, Tamil Nadu tried a more detailed exercise in the Uttar Merur block in the district of Chingleput. Here, all the families below the poverty line were enumerated within a period of two months by the existing staff in the format utilised for the Somangalam Project. Nearly 80 per cent of the families in Uttar Merur were found to be below the poverty line. Then the strategy of Somangalam was repeated for each of these families and some programme or the other was identified for each member of these poor families. It was estimated at the beginning that if the programme was successful, there will be substantial improvement in the economy of the poorer families over a period of three years.

8.12 An Evaluation of these two experiments indicates that there has been little link up between the main occupation in the Block, its potential and the types of programmes that were provided for the families. Programmes which were acceptable to the people were limited by numbers whereas other programmes which did not have ready acceptance had large opportunities. Further, all the important needs of the families did not receive any attention. For instance, in Utter Merur where handloom industry is an important industry, it did not receive the required attention.

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the families rather than on the programmes with potential for which infrastructure could be made available. What is required is a closer link between infrastructure development and programmes which are feasible in the area and further between these programmes and the capacity of the families to absorb the technology. It is this tie up between the family-wise approach and the area approach that has to be established at the focal points.

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centres) in a planned manner so that no villages, as far as possible, more than 10 km. from such a focal point. In this manner, the planning process will be brought nearer to the field and the schemes will be more relevant to the problems and potentialities of the selected areas, and its people. In each cluster, one village should be developed as a focal point.

8.18 Introduction of such facilities would also bring in some element of urbanisation into the rural sector. The setting up of such a complex would also provide job opportunities for skilled, semi-skilled and unskilled persons. This would help to discourage the drift to towns and cities. It is also expected that by covering a proper mix of economic activities at the focal point along with implementation of development schemes in the periphery of each focal point, this will create new avenues of employment and ensure a fuller utilisation of local resources.

Administrative Framework for the Programme.

8.19 The Committee has already recommended that there should be an Integrated Area Development Project Authority covering two or three Blocks for taking up a comprehensive development programme, Block being the unit of planning and development. It would be the duty of the Project Authority to ensure that the rural development programmes of the cluster are not implemented as a separate programme with its own chain of command but are linked and coordinated with other Block level programmes as necessary.

8.20 It is very difficult to indicate what would be the requirement of the staff at the focal point as the latter would largely depend on the needs and the programme to be taken up. The Committee would, however, invite attention to its Report on "Organisation of Administrative and Financial Structures for Backward Area Development", wherein it is pointed out that if a proper decentralisation, rationalisation and streamlining of the existing staff located at the Block and at other level is undertaken, it may not be necessary to provide much additional staff. The Committee would, however, emphasise that it is essential that whatever be the programme, necessary support must be available to the focal point from the Block level. If this requires some strengthening of a particular discipline, this will have to be undertaken.

Methodology

8.21 A comprehensive resource survey is generally regarded as the first stage of assessing the potential for development. In its report referred to in para 20, the Committee has pointed

out that a comprehensive resources survey is too time taking and is not necessary in the short run. It has advised that the resources survey should aim at and be limited to such of the resources which can be developed with the technology at present available, the manpower in the area and the skill available and the state of the infrastructure and the administrative competence that is also available to translate potential into increasing the gross product. Identification of the resources that are to be studied in some depth for preparation of the plan for the Block is, therefore, to be the first exercise. The Committee recommends that this process should be carried out by the peripatetic team having a detailed dialogue first with the project level advisory group, helped by the administration at the project and the block level helped by higher level technical experts. This exercise will first of all identify the sectors in which development is possible in the area based on the present technology. The resources that are relevant for these growth sectors should then be identified and listed out.

8.22 Having done this, a parallel dialogue should be carried out in the same group on the capacity of the people to absorb the technology and deficiencies, if any, in the skills or capability of the people of the area. The initial exercise will have to be based on development of the area by the people. Exogenous development by entrepreneurship and skills from outside the area should be reserved for a later part of the planning process. If this dialogue is carried out effectively by a knowledgeable planning group, the items of resources which need detailed survey would be thrown up automatically. The Planning group will then organise survey of those resources only in the first run, on the basis of such statistical information as is readily available. Much of the statistics of resources like land, water, status of animal husbandry etc., which are developed by local enterprise can be fairly assessed on the basis of existing statistics. Such a general appreciation will be enough in the first stage of planning. Too much time should not be taken in getting into details of village-wise statistics at this stage.

8.23 Even though research findings and technology are available and the people of the area are helped by the administration, there should be institutions and infrastructure which can provide the necessary support for the exploitation of the potential. Establishment of institutions for development and improvement of the structure is a continuing process. Normally at the present stage of development of the country it will be found that rudiments of the necessary institutions and infrastructure are already available in almost every block in the country except the most backward in the interior areas. Where after the exercise it is found that the

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infrastructure has to be improved or the institutional base strengthened, a time phase for strengthening should be drawn up in consultation with the concerned organisations. This will be the second part of the exercise.

8.24 Having identified the sectors for the growth and the state of the infrastructure and institutions and the time phase for development of the same, a programme phased out over time can be developed by the planning group for development of various areas of the block. This exercise can be translated into a workable scheme based on the finances available overtime and the technical support that is available or can be made available during the progress of the plan.

8.25 The most difficult part of this exercise will now come into focus and this is the tying up of the families of the weaker, the disadvantaged and the poorer sections of the community in the growth process. We have the experience of the various family-wise approaches carried out in the various area programmes during the Fifth Plan period and onwards. The SFDA, DPAP, Tribal Welfare Programmes, IRDP, Hill Area Programmes, which have all adopted this approach in varying degrees have tried to evolve a reasonable methodology. The Small Farmers Development Agency in which are included Marginal Farmers and Agricultural Labour Scheme had emphasised the need for developing an area programme in which all those in the area with necessary capacity and skill will take part but special attention will be paid to the small and marginal Farmers and agricultural labourers who will be given special preference and special help and attention in the programme so that they can fully avail of the area development. The example stated in the original formulation by Government was that of a minor irrigation programme covering also small and marginal farmers who were owning part of the area. Another example was the animal husbandry programme, milch cows and buffaloes where the agricultural labourers, small and marginal farmers who participate will be part of the programme of production and marketing. Unfortunately, the experience of the actual working of the scheme in many parts of the country shows that this essential requirement of devetailing a viable area programme with the family-wise approach has not received sufficient attention so far, may be because a workable methodology has not yet developed. The Committee, therefore, in its discussions at the field level, the district level and at the state level had a dialogue on this with the development administrators so as to develop a methodology which may be accepted. The Integrated Rural Development Programme which was originally conceived by the Planning Commission as an Area Development Programme with special attention to the disadvantaged families, has ulti-

mately limited itself to development in isolation of a certain number of families per year in the block. The Antyodaya Approach of Rajasthan also resulted in the family-wise approach not being tied to the area development and the infrastructure that needed to be imposed on the development process. These deficiencies have already been identified and various measures are being taken in the field trying to solve them. The Committee is of the view that unless a methodology is prescribed which is understood by the field level organisations of the various development administrations and their respective roles clearly defined in the process, this tie up cannot take place.

8.26 The initial enumeration of the families, their occupation and income for the bench mark survey will be relevant to all types of methodology for their development. This exercise has to be done. Whilst carrying out this survey in a block, the Uttar Merur example shows that taking the entire block at one sweep probably makes the problem too large for a planning group to really tie up programmes with the families. It is, therefore, suggested that programmes should be phased over a period of five years. Any attempt to rush this time phase will be counter productive at the end.

8.27 Having decided on a quinquennial time frame for the family-wise approach, a haphazard identification of one-fifth of the families in a block each year will also not be desirable. The Committee would recommend that five foci, suitably placed in important villages in the block, and sufficiently dispersed over the area of the block, may be selected for starting the family-wise assessment. For each of these regions, the family-wise study and link up of the programme will have to be phased over a five year period. Roughly each of these areas will have 4,000 families. In the first year, 800 to 1000 families round the focus in the group of villages adjacent may be taken up for detailed survey and link up of programmes. The second year, similarly 800 to 1000 families in the next ring of villages from the focus should be attempted. Thus, in the 4 to 5 years, all the families in the area will be covered.

8.28 Having identified the present status of employment and income of every member in the family in the number of families taken up every year for investigation, the second stage of linking up the family and its members with a developmental approach is the next and most difficult exercise. It is not enough to ask the family members what type of programme each of them would like to take up, if necessary technical and financial help is provided. Normally, the villager is not sufficiently aware of the various development programmes that are available for his improvement. The Government of India have issued

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instructions from time to time indicating the type of programmes for which technological and planning support were available so that the field workers may know what type of programmes are available for the improvement of the rural families. Unfortunately, the Committee found during its field visits that even this initial write up of available programmes had not trickled down to the blocks and in some cases even to the districts. As a result, even at the district level one found substantial ignorance of development programmes which are available in the plan for rural development in the various sectors. Unless a rural family is aware of the various programmes which they can adopt, their choice is going to be haphazard. So before, members of the family can be asked the question as to what development programmes they will adopt, there has to be sufficient dialogue between the planners and the people to explain what sort of programmes are available.

8.29 The planning group having identified the type of development programmes which are suitable to the area, it is necessary to examine whether there are already nuclei of various programmes in the block. Where there are no nuclei of such programmes, pilot programmes will have to be established as demonstration centres in the block. It is not enough that there should be only one or two demonstration per focal point area (mandal). This initial demonstration of the new programmes in each mandal area is a must if the family-wise programme is to be tried up to the area programmes. Thus simultaneously with the preparation of the block programme and enumeration of the families and their capacity, a parallel demonstration programme of the various developmental approaches available and considered suitable in the area should be started.

8.30 The Planning process will be a continuous one, refining the family-wise approach as programmes are demonstrated and families adopt them. One should not wait for perfection before starting the link up between family-wise approach and the area programmes. In each block, in each of the mandals there must be some programme or the other considered suitable for the area which are already in operation and showing results. So, in the initial discussion with the families about programmes that their members may choose, they will have to be asked about the programmes that have already been demonstrated and which they will be able to judge as suitable or otherwise for themselves. Then only there will be a meaningful link up between a family's choice and the type of programme that will be suitable to the area.

8.31 Considering the intricacies of the link up between family-wise planning and the area approach, it will be seen that not all families and

not all members of the families can be automatically linked up each year with a development programme under this approach. This is why an Antyodaya approach had been recommended in identifying families for improvement so that those below the poverty line could be brought out of their poverty within a reasonable time. This explains the need for stipulation in the IRD programme that each year a certain number only should be brought within the programme of family-wise approach. The pace of link up of family-wise approach to area potential cannot be expedited beyond a point.

8.32 Does this mean that the poor families will have to wait till programmes can be linked up in the planning process year by year. One lesson we can draw from the Somangalam and Uttar Merur approach is that there are certain programmes already in the plan which develop certain infrastructure in the area which can be availed of for development of various classes of families in the area. For example, a minor irrigation project for an area gives irrigation benefit also to small and marginal farmers in the command. There are programmes for land shaping, command area development and agricultural extension which will automatically enable each of these families to improve their position. Meanwhile, the medium and large farmers in the command can go on to intensive agriculture which will require labour for larger number of days per year in the cultivation, thereby giving extra labour opportunities to the agricultural labour. Similarly an artificial insemination scheme for cattle can produce crossbred heifers in any family—small, medium or marginal farmers or agricultural labour who can own a cow even if it be a scrub cow provided it is still fertile. A crossbred heifer obtained thus by a poor family without much investment can either lead to a better economy in milk production and sale by the family or a capital return sale of the crossbred heifer. Thus, the general development programmes in the area will have a definite role in giving greater income opportunities to all classes of the population. In the family-wise approach, the planning group should take this into consideration and see how much of the families which were not given a link up with a development programme during the year can be benefited by the area programme. It will then be their duty to enumerate such families who will benefit and see that the extension organisation attends to them and that they get the required benefit.

8.33 The above analysis shows that by identifying the various sectors of development and then linking up of the family with the programme, we shall be going back to the spread of development contemplated under the Uttar Merur Project, but through a different path. The path that the Committee has recommended tries to adjust the programme at each stage with the

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facilities that are available at that point of time. The sequence of action is as follow:—

- (a) development programmes which are already understood in the area and are suitably demonstrated, should be linked up with the family approach;
- (b) general schemes of development which automatically lead to development of families within the ambit of the schemes are to be identified and the beneficiaries listed and their requirements ensured;
- (c) simultaneously, tightening of the effectiveness of the input supplies including credit and the health and pest control measures so as to give necessary coverage to every family in the rural area covered by the programme; and
- (d) demonstrating new programmes in the Block first and then enumerating families for coverage in different clusters.

8.34 Summing up, the methodology will comprise of an initial assessment of the possible development that can be adopted in the block with the manpower and skill available and the infrastructure and services that are already established. Simultaneously with this exercise, the progressing location of the focal points should be completed before the start of the operations and the number of families between 800 to 1000 in the group of villages round the focal points should be identified and a family-wise chart kept ready. If the Uttar Merur exercise can be taken as a guide, by merely training the available block staff in the statistical exercise, it should be possible without any large expenditure to complete the family-wise survey and fill up the forms in a matter of two months. If the planning authorities choose the lean season, it is easy to depute the various developmental staff, particularly the village level workers and agriculture staff for completing this exercise. Any additional expenditure on stationery, transport etc., should be a part of the plan expenditure. The next stage of the planning will be to identify concentrated areas in the various focal point clusters where the various programmes, already identified can be exploited because of the availability of the necessary infrastructure and service supports. This detailed exercise will probably take a couple of months. Once the exercise is completed, and the various programmes which can be straightway implemented have been identified the extension organisation under the various development departments should start organising the pilot programmes in their respective areas to demonstrate to the various families the advantages in the new technology. Untill this initial demonstration is done and profitability established, the families particularly the poor families will not respond to the suggestion to take to the new technology. During the demonstrations

the extension publicity should be maintained. Various programmes will have different time phase for completion. As soon as a demonstration is completed, the relevant departmental extension staff will have to do wide propaganda in the area already identified as suitable for their programmes so that the villagers will be aware of the potential and would have also seen the actual demonstration. The time phases for the various programmes will obviously be different. The next phase of tying up the family with new technologies and programmes will be started by each of the departments in their areas of operation as soon as the demonstration has been established. The family-wise chart should then be filed up by calling upon the villagers who would take up that programme in the identified areas in the various focal point commands. The department concerned will then pass on to the phase of implementation of the programme involving the families who have accepted. It will be seen that the developmental programmes under various departments will start in different periods of time and there need not be an attempt to tie up all the programmes before starting in any developmental sector. The planning group will have to work out a detailed PERT chart for each of the programmes identifying the area where they will be carried out from the phase of demonstration, the phase of calling for applications and explaining programmes to villagers and then the phase of starting and implementation of the programme. The entire strategy of backward area development is based on the premise that there is sufficient technology available in the country under various disciplines to exploit the natural and human resources in the backward areas and boost up productivity very substantially and simultaneously to help the poorer families to come up rapidly in the economic scale. Therefore, the introduction of new technology and involving as large a number of the families in the block in the process of development is the most important part of our programme. At this juncture it is necessary to sound a note of warning. All our area programmes were started with the objective of developing the production potential of the area on the basis of the introduction of new technology and provision of suitable institutional, infrastructural etc. facilities. Yet, over the years, however, the emphasis has tended to shift. As a result, even though the technology is acceptable, the actual impact of the new technologies in the rural areas has been extremely patchy and has certainly not percolated generally to the masses. It has to be remembered that the poor have very little risk capacity. They will not come forward in the initial phase of development to absorb new technologies. They would like to see their more affluent neighbours adopt the technology and establish the profitability before they venture, particularly with programmes requiring large capital investment. The planning group will, therefore,

facilities that are available at that point of time. The sequence of action is as follow:—

- (a) development programmes which are already understood in the area and are suitably demonstrated, should be linked up with the family approach;
- (b) general schemes of development which automatically lead to development of families within the ambit of the schemes are to be identified and the beneficiaries listed and their requirements ensured;
- (c) simultaneously, tightening of the effectiveness of the input supplies including credit and the health and pest control measures so as to give necessary coverage to every family in the rural area covered by the programme; and
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have to take note of this basic factor and provide for the development of all the families in the area considered suitable for a programme or programmes. The more affluent the middling and larger farmers would start the process of change. Allowing a year for this process to establish the profitability, the extension organisation should be tuned to expand their activities and approach to the poorer sections so as to involve them in the development. The Committee emphasises that what they are seeking is development of the area as a whole by utilising the resources of the area and not merely a selective development of the poorer sections only. Incidentally, every development of the middle level and higher level of families in a block would lead to larger labour opportunities for the poorer sections. The Committee has already explained how in a drought prone area merely following the methodology of development through the Broad Bed Furrow system of cultivation and utilising high yielding varieties of seeds, fertilisers and pesticides, substantial labour opportunities will be generated which the existing labour in the area will find unable to provide. This example shows how a general development leads to growing demand for labour. Today, the agricultural labour and rural

labour suffer from having to sell their wares in a buyers market. The general growth that can be initiated and should be initiated will create the sellers market for labour which only will give a bargaining position to the agricultural labourer and hence higher wages.

financial

8.35 Some additional support would be necessary for surveys, both area and family-wise planning, provision of infrastructure etc. Ordinarily it should be a part of the budget of the Block and there should be no difficulty in taking care of this expenditure from the various special grants which are being made available to the Block. In any case, the Committee has earlier recommended in its report on "Organisation of Administrative and Financial Structures for Backward Area Development" that Rs. 5 lakhs per annum should be given to each of the Blocks in the backward area, as per a phased programme. The Committee feels that with this money as well as the money available under IRD and other programmes, it should be possible for the Project Authority to build up 5 focal point centres in each Block.

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A Resume of Semangalam Project in Tamil Nadu

The Somangalam Project was launched on 15th February, 1976 with the assistance of voluntary agencies. A team of experts from the rural reconstruction project conducted base line survey after interviewing each household and prepared draft plan for translating the idea of Integrated Rural Development in the area. They found it suitable for overall development as the block had a large number of weaker section families having good development potential. Before the implementation of the project, per capita income of Somangalam village was Rs. 417 against Rs. 730 in Tamil Nadu and Rs. 690 at the National levels. So this area was taken up for development work aiming to raise them to the level of at least the state average.

2. The project aimed at bringing about overall development in selected 11 villages by concentrating the activities of various development programmes, mobilising institutional finance, exploiting fully the growth potential and diversifying economic occupations.

3. The project started with a family by family analysis of the present occupation of the members of the family, their individual income, the spare time available for other occupations and lastly their willingness to change to a more remunerative occupation for their time. Based on this, each family was asked to indicate what they can do to increase their income, provided necessary capital is given to them on reasonable rates. The programmes that will benefit him and the skill development that will benefit the family were also listed. Then each of the family was approached with a view to improving its employment and income.

4. As the project aimed to cover the families below the poverty line and assist them with employment opportunities, household plan card was introduced for each family, where their resources, skills, manpower and capabilities were listed.

5. The Rural Extension Training Centre trainees numbeing 63 were deployed for a period of 15 days to prepare viable scheme as suggested by the technical department in consultation with the head of the each of the household. A card indicating the plan has been given to the each of the head of the household for making him aware of the scheme intended for him. These plan cards

are computed into the village and project plan. The approximately cost for the preparation of such plan works out to Rs. 5 per family as detailed below:—

Data for 6000 Families

	Rs.
(a) Cost of surveyor at the rate of 50 surveys for 30 days paying honorarium Rs. 5/-per day	7,500
(b) Tabulation cost of Rs. 8/- per day for 8 days to 50 surveyors	3,200
(c) Supervisory staff 10 Nos. for 38 days T.A., etc.	3,800
(d) Cost of stationery and forms	11,000
(e) Training for the staff for 3 days	4,500
Total	30,000

6. Families have opted for various types of self-employment like a plying bullock cart, subsidiary agricultural programmes like keeping milch animals, pigs and goats or plying artisan vocations. The project provided necessary technical guidance and arranged the loans to enable the families to pursue various occupations they had opted for. Some guidance was also given in the selection of suitable remmunerative occupations.

7. A skeleton project staff were created for this purpose for a period of two years:—

Project Co-ordinator—One

Additional Block Development Officer—One

Area Organiser—Three

Mukhyasevika—One

Attender-cum-Messenger—One

Accountant-cum-Typist—One

Transport facilities viz., a scooter, a moter cycle and 3 cycles were provided for faster movements of the staff in the project area. The role of the project staff is to mobilise the institutional finance for executing the household plan and assist the voluntary agencies and Government Departments to provide common facilities to the communities. The area organisers had about 700 families under their constant touch and they visited these families most frequently to find out their participation in the programme, utilisation of the investments, coordination of the production

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programmes and marketing of the produce so produced and thus to get the feed back. These area organisers periodically assessed, projected and monitored the increase of income of families to the project authorities once in three months.

8. Schemes envisaged development in agriculture, medium and minor irrigation, dairy development, poultry and sheep development, veterinary, industries, health, education, woman and children programmes, communication and electricity services.

9. It was found that there was no clear attempt to provide raw material supply of marketing cover for the new activities. There was also no full time technical support to the new ventures. As a result not many innovative paying schemes came under the purview of the project. In spite of this over three years the project managed to increase the income of the individual families quite appreciably and changed the skewness of the income curve.

10. The project mobilised Rs. 67.95 lakhs from the Commercial Banks, Government Departments utilised a sum of Rs. 25.91 lakhs for welfare activities and for providing infrastructural facilities in the three year period. The income of Rs. 34.03 lakhs was generated from indirect investments. By the end of March, 1979 the gross income of the project area was Rs. 85.35 lakhs (Rs. 48.12 lakhs existing plus Rs. 37.23 lakhs additional) and the per capita income went up from Rs. 417 to Rs. 755.

11. Income groupwise family distribution changed as under:—

Monthly Income (Rs.)	Income of families	
	Before Implementation	After Implementation
0—100	644	36
101—200	939	532
201—300	310	669
301—400	228	377
Above 400	59	626

12. The progress of the project from 1-4-76 to 31-3-1979 is given below:—

(a) Agriculture/Irrigation

16 irrigation tanks were renovated at a cost of Rs. 2.64 lakhs to irrigate 2383 acres of land and 4629 acres additional area brought under High Yielding Varieties, 28140 kg. of improved seed distributed. Yield rate of paddy increased from 700 kgs to 1500 kgs per acre. 52 new wells with pump sets and 50mohot wells were sunk at a cost of Rs. 7.41 lakhs, which helped 255 acre

to be brought under second and third crop cultivation.

(b) Animal Husbandry

At a cost of Rs. 28.30 lakhs, 2307 milch animals were distributed to 1464 families, 10 milk supply societies helped in collection of milk and supply of concentrates. 89 units of 2235 sheeps at a cost of Rs. 2.77 lakhs were supplied to 89 families. 392 units of 7315 ducks and poultry birds to 392 families were supplied at a cost of Rs. 0.42 lakhs. Programme of artificial insemination with frozen semen technique was introduced.

(c) Industries

Supply of loans to weavers, improved tools to artisan families, imparting training on palm products to women, provision of banks to educated youths, establishment of industrial estates were taken up. 108 weaver families were assisted with 158 looms at a cost of Rs. 1.46 lakhs. A cooperative society was formed by weavers. Lungies produced were marketed in Madras. This substantially added to their income. 11 carpenters were assisted by provision of improved tools at a cost of Rs. 0.13 lakhs. To diversify the occupation educated youths and agricultural labourers were helped with bank finance of Rs. 0.80 lakhs to start petty trade, cycle shops etc. 78 women were trained under palm leaf crafts and palm fibre extraction under the scheme of recycling of waste, 8 families were assisted to have Gobar Gas plant at a cost of Rs. 0.32 lakhs for domestic purposes.

(d) Health

Under the health cover programme, the Rural Health Centre conducted medical check up of every individual and maintained health history i.e. maternity card, infant card, school children card and adult card. Health Committees were constituted in every village to advise people on environmental sanitation. Educated youth were trained in First Aid. 11,311 persons were medically checked up, 1211 maternity cases followed up, 2203 children were vaccinated under DPT, 571 families were brought under permanent family welfare programme, 37 latrines were constructed in 37 houses.

(e) Education

Two Harijan Welfare-Hostels, a Science Laboratory in Somangalam High School was opened as a part of the project plan, with cent per cent Government grant. Child welfare centre, craft centres for women, Agro-service centre, agriculture sub-depot, a sheep breeding cooperative society, 16 kms black topped road, a Balwadi in each village and agricultural godown under the cooperative society were the infrastructure facilities created during the short-span of three years. Many training programmes were organised.

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9. GROWTH CENTRE AS THE CATALYST OF AREA DEVELOPMENT

The Committee has in its several reports dealing with areas of fundamental backwardness suggested measures for increasing productivity and utilising fully the development potential of these areas and also for achieving a reasonable distribution of benefits towards the good of social justice. All these measures will lead to the development of the basic rural potential and the industrial potential of the area. Yet there is a certain gap in the framework of policy which needs to be filled. As regards general rural development, the approach has been towards increasing the skills for getting maximum return out of the new technologies and the potential of the area for development in agriculture, animal husbandry, horticulture, forestry and fisheries. This frame leaves out a sector of opportunities for the semi-skilled and highly skilled population and educated youth in the areas of fundamental backwardness which is available in the general growth of the nation in various fields of development. Taking an overall picture of the backwardness we see, as in the hill areas of the North, large scale out-migration of highly skilled and semi-skilled personnel for earning a livelihood suited to their skills. Out-migration of skill and entrepreneurial talent seems to be a general movement from areas of fundamental backwardness to more prosperous areas giving better opportunities. The Committee in its report on 'Industrial Dispersal' pointed out the relevance of keeping back entrepreneurial talent and skilled and semi-skilled personnel in the backward areas for the development of industries in those areas.

9.2 From the First Plan onwards the country has been investing very substantial funds in building up the infrastructure in transport, power and irrigation, exploiting the vast mineral resources and in establishing basic industries and developing huge urban complexes. These investments are scattered all over the country. Many of them like the irrigation reservoirs and the hydel scheme and many basic industries relating to minerals and exploitation of minerals itself are located in the areas of fundamental backwardness in the country. These large projects provide opportunity for employment directly to highly skilled, skilled, semi-skilled and unskilled labour. The projects also provide opportunities of secondary and tertiary growth which are sometimes very large and where secondary production units like small and ancillary industries and service systems need to be developed. The tertiary sector of service is many faceted and the more sophisticated the basic unit the more highly spread out the opportunities for tertiary investment and employment.

9.3 A broad view of how these large projects, many of which are in the backward areas, have really initiated and started the growth of the people in the backward areas, shows a disheartening picture. The classic case is the Jamshedpur Complex in Bihar which has not led to much complementary growth in the rural areas away from the huge urban complex. This large complex of industries was started long before freedom. Since Independence many large industrial projects have been set up in backward areas e.g. at :—

- Bhilai, Rourkela and Bokaro (Steel)
- Korba (Coal, Power, Aluminium)
- Sindri, Gorakhpur (Fertilizers)
- Namrup, Barauni (Fertilizers and Petroleum)
- Bhopal, Hardwar, Ranchi, Jhansi (Engineering)

The list would be even larger if coal and mineral development schemes, power projects and irrigation projects are included. In most of these projects neither the direct involvement in the construction of these projects nor the secondary and tertiary growth opportunities could be availed of to any large extent by the people of the backward areas round about. Further, there has been no complementary growth in other sectors of the economy as we normally expect. A thesis that growth by itself leads to distribution of growth cannot be controverted better than by a look at these projects. The Committee has noted with much concern this gap between the possible opportunities and the availment of the opportunities by the surrounding population. The Committee has tried to see if a bridging of this gap is possible. The broad conclusion is that this is possible provided very substantial support, planning and implementation of various infrastructure and aid programmes are carried out by the State administration.

9.4 Broadly speaking, we can foresee five major types of development which would create growth centres with substantial potential for generating allround development in the backward areas surrounding the projects and amongst the people of the area. These are :

- (i) Industrial complexes
- (ii) Growing Urban Complexes
- (iii) Raw material exploitation (forests and minerals and industries based thereon),

9. GROWTH CENTRE AS THE CATALYST OF AREA DEVELOPMENT

The Committee has in its several reports dealing with areas of fundamental backwardness suggested measures for increasing productivity and utilising fully the development potential of these areas and also for achieving a reasonable distribution of benefits towards the good of social justice. All these measures will lead to the development of the basic rural potential and the industrial potential of the area. Yet there is a certain gap in the framework of policy which needs to be filled. As regards general rural development, the approach has been towards increasing the skills for getting maximum return out of the new technologies and the potential of the area for development in agriculture, animal husbandry, horticulture, forestry and fisheries. This frame leaves out a sector of opportunities for the semi-skilled and highly skilled population and educated youth in the areas of fundamental backwardness which is available in the general growth of the nation in various fields of development. Taking an overall picture of the backwardness we see, as in the hill areas of the North, large scale out-migration of highly skilled and semi-skilled personnel for earning a livelihood suited to their skills. Out-migration of skill and entrepreneurial talent seems to be a general movement from areas of fundamental backwardness to more prosperous areas giving better opportunities. The Committee in its report on 'Industrial Dispersal' pointed out the relevance of keeping back entrepreneurial talent and skilled and semi-skilled personnel in the backward areas for the development of industries in those areas.

9.2 From the First Plan onwards the country has been investing very substantial funds in building up the infrastructure in transport, power and irrigation, exploiting the vast mineral resources and in establishing basic industries and developing huge urban complexes. These investments are scattered all over the country. Many of them like the irrigation reservoirs and the hydel scheme and many basic industries relating to minerals and exploitation of minerals itself are located in the areas of fundamental backwardness in the country. These large projects provide opportunity for employment directly to highly skilled, skilled, semi-skilled and unskilled labour. The projects also provide opportunities of secondary and tertiary growth which are sometimes very large and where secondary production units like small and ancillary industries and service systems need to be developed. The tertiary sector of service is many faceted and the more sophisticated the basic unit the more highly spread out the opportunities for tertiary investment and employment.

9.3 A broad view of how these large projects, many of which are in the backward areas, have really initiated and started the growth of the people in the backward areas, shows a disheartening picture. The classic case is the Jamshedpur Complex in Bihar which has not led to much complementary growth in the rural areas away from the huge urban complex. This large complex of industries was started long before freedom. Since Independence many large industrial projects have been set up in backward areas e.g. at :—

- Bhilai, Rourkela and Bokaro (Steel)
- Korba (Coal, Power, Aluminium)
- Sindri, Gorakhpur (Fertilizers)
- Namrup, Barauni (Fertilizers and Petroleum)
- Bhopal, Hardwar, Ranchi, Jhansi (Engineering)

The list would be even larger if coal and mineral development schemes, power projects and irrigation projects are included. In most of these projects neither the direct involvement in the construction of these projects nor the secondary and tertiary growth opportunities could be availed of to any large extent by the people of the backward areas round about. Further, there has been no complementary growth in other sectors of the economy as we normally expect. A thesis that growth by itself leads to distribution of growth cannot be controverted better than by a look at these projects. The Committee has noted with much concern this gap between the possible opportunities and the availment of the opportunities by the surrounding population. The Committee has tried to see if a bridging of this gap is possible. The broad conclusion is that this is possible provided very substantial support, planning and implementation of various infrastructure and aid programmes are carried out by the State administration.

9.4 Broadly speaking, we can foresee five major types of development which would create growth centres with substantial potential for generating allround development in the backward areas surrounding the projects and amongst the people of the area. These are :

- (i) Industrial complexes
- (ii) Growing Urban Complexes
- (iii) Raw material exploitation (forests and minerals and industries based thereon),

- (iv) Large Irrigation Projects; and
- (v) Hydel and Thermal Projects.

9.5 The type of secondary and tertiary potential generated and the measures required to ensure that this potential is used for the development of the backward area will vary from case to case. In order to gain some insight, the Committee decided to undertake an exercise for a specific project viz., the Indravati Project in Orissa.

9.6 The Indravati Project in the district of Koraput in Orissa is a very large hydel project. It is also an irrigation project irrigating 5.4 lakh acres in the district of Kalahandi, neighbouring Koraput. The Committee with the help of the Government of Orissa and the concerned administrative departments of that Government has tried to build up a possible frame for area and people's development on the basis of the potential generated by the project. The preliminary frame that was developed out of these discussions is enclosed at Annexure 9.1. This gives broadly a glimpse at the magnitude of the problem involved. In particular this pinpoints these aspects of the planning and implementation process that are important for tying up the growth centres potential with the development of the backward area and its people.

9.7 The construction phase of the project has many opportunities for suitable entrepreneurs to avail of the employment and earning opportunities. The construction itself generates secondary and tertiary growth in the infrastructure creation and the service supports required. The summary discloses that the sectors of opportunity appear to be :—

- (a) District employment in the construction itself for semi-skilled and skilled labour of various grades and competence;
- (b) large-scale ancillary industrial development to supply materials required for the construction and for the housing projects that are part of the project;
- (c) A new road structure which will lead to large scale traffic movements which itself will generate opportunities for supporting services at various key centres along the road. These centres in effect become sub-growth centres.
- (d) The induction of a large working population earning wages and salaries at high level in a poor backward area generates demands for various consumption goods including vegetables, meat,

eggs, milk etc., which can be supported by an aggressive rural development programmes in the surrounding areas, and

- (e) The transport and other services give opportunities to entrepreneurs, particularly unemployed educated youth to earn a living by following these opportunities.

9.8 A survey was done of the availability of various types of semi-skilled and skilled labour within a radius of 100 miles from the Indravati Project. The result has been summarised in Annexure 9.1. The important points that have to be noted are that (i) the opportunities for even semi-skilled labour like blacksmiths, masons and carpenters are far in excess of what this area can at present provide from the existing artisan groups; and (ii) the estimate only covers the direct employment in the project. The secondary growth in the villages and the new requirements of these services in the villages have not yet been assessed. A continuous monitoring of demand will have to be made and steps taken to train the local people to avail of the opportunities. Thus, besides the project plan, a large secondary plan for training of manpower and its absorption has to be made. The responsibility for doing this must rest with the district planning centre working in association with the project.

9.9 Large scale ancillary industrial development providing materials required for the construction of the project and for the housing can well be developed in these backward areas following the guidelines that have been given in the report of the Committee on 'Industrial Dispersal'. These industries will have to be nurtured from the start in ensuring the ancillarisation of the demand of the project. What is equally important is keeping an eye on what can happen to these industrial units developed in the backward areas when the project is no more. The Committee in its report on 'Industrial Dispersal' has suggested linking up the marketing of the goods of the small industry with the demand that is raised by the State and various Governmental organisations for regular supplies of maintenance goods. This process should also be started from the beginning whenever such a potential for development is created by large projects.

9.10 The new road structure leads to opportunities for developing sub-growth centres which themselves will then generate secondary and tertiary employment in the surrounding areas. Such sub-growth centres where a large number of people will be gathered will require various amenities and services. Proper town planning

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in the beginning itself for the sub-growth centres will save a lot of trouble later on. Thus town planning and town development will have to be linked up to the growth centre approach. The urbanisation policy of the government stresses the importance of promoting the development of small and medium towns. The spin-off effects of large projects generates a potential for such development. The district planning centre must identify these opportunities and provide for them in the development plan.

9.11 Supply and services for the large population that will congregate at the project and at the sub-growth centres will require consumer goods and various services. Unless there is sufficient planning of the production of the necessary consumer goods as far as possible in the surrounding areas and for training people for taking up the service occupations that are available, the general experience has been that opportunities are grabbed by generally more forward people from other areas of the State or outside. If our interest is in benefiting the local population and raising their standard of living, this planning of consumer goods production, both agriculture and otherwise, and training people for the services opportunities must be an essential part of the State contribution to the development of the backward areas.

9.12 Transport services give a lot of opportunities for self employment of educated unemployed youth. These opportunities are of a fairly remunerative kind. Entrepreneur identification, their training, credit and technical advice that may be needed have all to be laid down by the State. This is another sector of planning which cannot happen by just wishing.

9.13 Last but not the least, the development of the area to be irrigated by the project itself calls for tremendous amount of detailed planning of the opportunities and how to avail of them. Annexure 9.1 gives detailed picture of the location specific planning required. More detailed work in localising programmes and projects in agriculture and connected subsidiary occupations will itself absorb a large number of planning and executing personnel.

9.14 Agricultural development in the vast areas that would be irrigated will need marketing facilities, credit transport for moving the surplus production to outside markets. Unless this is planned in advance and the facilities are provided, agricultural development and development of other subsidiary occupations will not progress satisfactorily. Thus, another large scale effort at detailed planning and implementation has to be taken care of by the State.

9.15 This resume gives some idea of the vast magnitude of planning and implementation machinery that a State has to invest in if large hydel and irrigation projects are to benefit the local people. Incidentally, the study will show that in the higher levels of technology and skill, the local region cannot possibly supply all the requirements. Opportunities will have to be shared by people from other forward areas of the State itself. The report also shows how forward planning for induction of students into the various technical levels and courses and then tying up with the project requirements, requires very detailed planning.

9.16 The report of the Indravathi Project cannot be taken as a final say on the magnitude of the opportunities or of the planning and implementation process. The State is pursuing the matter in greater detail by adaptation of the broad features of the preliminary frame. Whereas the exercise can give some idea of what is necessary in hydel and large irrigation projects, the opportunities in the other types of growth centres may need different approaches and different sets of disciplines. In the following paragraphs some very broad and general suggestions are offered. Unless this is followed up by detailed planning for the individual type of programmes for getting sufficient guidance on the actual difficulties in implementation, the parameters will not be clear.

Industrial Growth Centres

9.17 In the report on 'Industrial Dispersal', the Committee has already given an idea of the developmental opportunities arising from the construction and running of the industrial complexes. The Committee has also suggested a District Planning Unit which will look into these problems and ensure that the opportunities for growth are availed of by the surrounding backward areas.

(Ref. para 9.29 of the Report on Industrial Dispersal, NCDBA). Broadly, the requirements can be identified as :

- (a) Opportunities for direct employment in the construction and operational phase of the industries that will be located in the industrial complex. A similar strategy to that followed in Indravathi Project may be used. The principal difference is that the long-term requirements of skilled labour in the industrial complex will be more substantial and will require detailed planning of labour training. The Committee has dealt with this aspect in some detail in its Report on Industrial Dispersal.

in the beginning itself for the sub-growth centres will save a lot of trouble later on. Thus town planning and town development will have to be linked up to the growth centre approach. The urbanisation policy of the government stresses the importance of promoting the development of small and medium towns. The spin-off effects of large projects generates a potential for such development. The district planning centre must identify these opportunities and provide for them in the development plan.

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- (c) The educational requirements of an industrial growth centre would be much more than in a hydel or irrigation project. Similarly, medical facilities will be of a higher order. Unless the necessary infrastructure for both of the right quality is built up the growth centre will not develop and hence further development will not take place.
- (d) Transport and communication services will be tremendously important in an industrial growth centre.

Growing Urban complexes

9.18 Urban complexes can grow rapidly for a variety of reasons like the influx of industry, the growth of administration, the development of new trading and service activities etc. Town planning deals with planning the development of urban complexes. Growing towns are taken up for planning to ensure that haphazard growth does not ultimately make development difficult. It is assumed that town planning and its implementation will be duly looked after by relevant planning and development groups. The development in urban complexes give opportunities for secondary and tertiary employment and

opportunities for consumer goods supplies. Only if this planning is done in detail the surrounding areas can benefit. At present town planning is usually conceived of only in physical terms like zoning of land use, laying down of water supply, sanitation, roads, etc. The economic development potential of urban complexes is seldom taken in to account systematically. It is necessary that the economic content of town planning exercises be strengthened if the objective of benefiting the local population is to be achieved.

Raw material exploitation (Forests and mineral and industries based thereon)

9.19 The magnitude of these projects may not, in many cases, be large except in large mining programmes and industries based on minerals. Opportunities for secondary and tertiary sectors may be limited. But the general experience is that wherever projects of this nature are developed in backward areas normally, local people do not get a look in either for employment or for marketing their goods at reasonable prices. The linkages between such projects and opportunities for local people to avail of them will need a planning and implementation organisation. At what level this will be and what will be the sectors that will have to be looked into will be highly project specific.

9.20 Many large projects taken up in backward areas have a rehabilitation component for the displaced population. This is particularly true for large water resource projects and projects based on raw material exploitation. The funds provided in the project for rehabilitation can be used in a constructive way to promote area development and to strengthen the linkages between the project and the surrounding area. The present approach which sees rehabilitation largely as a matter of compensation should give way to a more positive approach which combines rehabilitation of the displaced families with area development.

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Growth centre Approach Frame for Indravati Project area—A Summary

1. A draft report for Indravati Project Area has been prepared by the Coordination Committee in the Planning and Coordination Department of the Government of Orissa. The inherent methodology and salient features of this report has been summarised in what follows :

Introduction

2. The Upper Indravati Project is being constructed in the districts of Koraput & Kalahandi. It envisages construction of 4 Dams and 8 Dykes. The main Dam is on the Indravati, the other three being on its three tributaries, the Podagada, the Kapur and the Murah. All these form a single reservoir connected together through two link channels to generate in all 1990 million KWH of electricity per year at 100 per cent load factor and it simultaneously will irrigate 5,40,000 acres annually both by flow and lift methods in Kalahandi district. The cost of the Project (excluding transmission) works out at Rs. 208.14 crores out of which Rs. 130.49 crores have been allocated to power and Rs. 77.65 crores to irrigation. The Upper Indravati Project forms the first stage of development potential of the Indravati basin.

3. The programme of construction of the project is spread over a span of 9 years. In the first 8 years civil works including Dam, Dykes, water control system and power houses and 80 per cent of distribution will be completed. The first unit will start generating power in the seventh year and the construction of other units will be commissioned at an interval of six months. The Project work has started in 1979 and is scheduled to be completed by the year 1989. The power plant will be located near the village Mukhiguda of Dharamagada Sub-Division of Kalahandi district. The Power Station will be connected to the load station at Rourkela by 400 KV line. It will also be lined with the Orissa grid at Therualli and also at the inter-linking Sub-station of Jeypore. The Flow irrigation is provided on both sides of River Hathi by taking canals on each side of the Weir. A network of canals distributaries, minors, sub-minors have been planned out.

4. Detailed programme has not yet been prepared for various phases of construction. Planning on the various aspects of the projects is now being attempted by the Government. With the advance of construction work of the project, the vast complex of infrastructure and ancillaries are bound to come up. The Project, therefore,

will act major instrument for transformation of the present socio-economic characteristics of the two backward districts of Koraput and Kalahandi and at the same time contribute to the overall development of the State. The Project construction and later power generation and irrigation will have a lot of development potential in the area leading to (a) development of new growth centres during construction phase commencing from 1979-80, (b) Rehabilitation of population affected by submergence under reservoir in the second phase commencing from 1983-84, and (c) command area development in the third phase commencing from 1986-87.

5. There will be two main growth centres at Khatiguda close to Indravati Dam side about 22 Kilometres from Tentulikunti and the other at Mukhibuda near the Power house which is about 102 Kilometres from Jeypatna. Administrative colonies are located at these two places. The population comprising of staff members and labourers with their families at present at each of the two places are about 1000 which is expected to increase to 5000 by the end of 1981-82. There will be separate divisions at the dam sites at Deopati, Podagada, Kapur and Muran in which the population has been estimated to be 1000 each. Besides there will be 4 transmission units at Kusumakhunti, Bizamanagalpur and Dharamagada in the command area and at each unit the population is estimated to be 500.

6. The location of the reservoir covers a part of Koraput and a part of Kalahandi district. About 20,000 people (4000 families) in these localities are expected to face submergence requiring rehabilitation. Of these 2000 families in Koraput district will be rehabilitated in Tentulikhunti and Nawarangpur Blocks giving each family six acres of non-irrigable land and 30 decimals of homestead land. Similarly, another 2,000 families from the reservoir area of the Kalahandi district will be rehabilitated in Jeypatna and Koksara Blocks of the command area giving 3 acres of irrigable land and 30 decimals of homestead land per family. This rehabilitation is expected to be done during 1982-83.

7. The Project construction and later power generation and irrigation have a lot of development potential of the area. The area within a radius of 100 miles of the Project can benefit from the activity. A well coordinated multidisciplinary spatial planning for growth centres with well knit communication and road network has been prepared to ensure that the ancillaries built

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special quota, (c) technical guidance in manufacturing process, (d) process know-how for maintenance of quality. A few important aspects are to be looked into by the Government of India while drawing up the industrial development plan in the area. In Orissa, there are hardly any units which are engaged in manufacturing items like Builder's hardware, Wood Screw, Wire Nails Barbed Wire, A. S. Plates and Rounds, Hume Pipes, RCS Spun pipes and a number of other sheet metal products. These are a few basic items which any project of this type would require. Non-availability of these items will result in delayed implementation of other projects. These small scale industries will be purely ancillary to these projects and should be promoted in these areas.

Ancillary Industry

22. The following ancillary industries have been identified which can be encouraged near the two power-cum-irrigation Project of Koraput District; (1) K. B. Bricks, (2) Granite Metal and Chips, (3) Mechanised carpentry, (4) Bamboo baskets, (5) M. S. Mortar Pans (6) Builders Hardware, (7) Pick axes, crow-bars, and spades, (8) wire nails, (9) wood crew, (10) bolts and nuts, (11) barbed wire, (12) steel fabrication (13) paints and varnishes, (14) Hume Pipes (15) RCC spun pipes, (16) Ammonia, Paper, (17) Wooden Electrical Accessories, (18) Shuttering materials (plywood), (19) M.S. rounds and flats, (20) General Engineering workshop, (21) Electric motor re-winding and repairing workshop, (22) Binding wire.

23. These two projects would also require a number of items which are required by them as well as in private sector and hence they should be encouraged in and around these two projects. The following items have been identified.

(1) Type Tyre retreadings and resoling, (2) Automobile servicing and repairing workshop, (3) Lime, (4) Distilled water for auto vehicles, (5) Non-galvanised corrugated sheets, (6) wooden handles for various tools, (7) P. V. C. cables.

These items are not only required at the construction stage but also in the post-implementation stage.

General Items

24. With the implementation of the project and the related development schemes of different Government departments & undertakings, and the establishment of industrial projects in the organised sector, a few townships will grow. A number of small growth points and centres

will emerge. A number of items will not only be required by the staff of the projects, workers, dwellers of different trades but also by the private market. The local entrepreneurs will be identified to take advantage of these prospects. On the basis of the abundant requirements, the following items have been identified.

(1) Bakery and confectionary, (2) washing soap, (3) Steel trunks and suit cases, (4) Aluminium utensils, (5) Powerloom (6) Spices grinding, (7) Aerated Water, (8) vermicelli, (9) Exercise books and other stationary.

Servicing Industries :

25. In order to cater to the daily and continuous requirement of the people in the projects periphery a number of servicing units have to be developed near the project site. These are :

(1) Radio repairing and servicing, (2) Electric goods repairing workshop, (3) Tailoring, (4) Battery charging shop, (5) Paddy milling and atta chakki, (6) Watch & Clock repairing workshop.

Other Small Scale Industries :

26. A number of other small-scale industries on the basis of resources and general market requirements may also be considered. Agricultural, Forest and Mineral resources of the area need productive utilisation. A few minor forest produce and important agricultural products are available in abundant quantity and on the basis of these the following items have been identified which may be developed in the small-scale sector :

(1) Oil mill both edible and non-edible, (2) Suji, Maida out of maize, (3) Bidi and Churut (4) Tamarind seed starch, (5) Broom sticks, (6) Pickle, jam and jelly, (7) Chuda and dal milling, (8) Safety matches, (9) Siali leaf plates, (10) China clay washeries, (11) Lime (12) Quartz grinding.

Cottage Industries

27. There are a number of artisans and craftsmen in the district and in view of the implementation of these projects there will be generation of market opportunities. The following artisan based industries are identified : (1) Pottery, (2) Processing of cereals and pulses, (3) Carpentry, (4) Blacksmithy, (5) Palmour, (6) Cane and bamboo, (7) Oil ghani, (8) Small footwear (9) Sisal rope, (10) Bellmetal utensils.

28. The District Industries Centres of Koraput and Kalahandi have undertaken massive programmes of identification of artisans, providing them with training, giving them improved tools and accessories and financial assistance.

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Programme under Trysem

29. In view of the implementation of the power projects and other industrial projects in the area, the informal sector will automatically grow. There are certain specific trades on which artisans will be identified and they will be offered training and assistance under TRYSEM Programme. These units will be developed in and around the project.

(1) Bicycle repairing shop, (2) Radio and motor repairing unit, (3) Pump and motor repairing unit, (4) Electric motor-rewinding, (5) Electrical appliance repairing, (6) Painting, (7) Hair cutting saloon (8) Laundry, (9) Petty trade (10) Bullock-cart manufacturing.

Miscellaneous

30. In addition to this, a number of shops are to be encouraged near the project site. The project authorities should part with space in their township and they may construct small rooms for bringing in a few essential shops, particularly vegetable, grocery, barber's saloon, laundry, footwear, repairing, ready-made shop, stationary shop etc.

Action Programme

31. The following action programmes is suggested for development of industries and implementation of these projects in the area. (1) The items tentatively identified at present, will be encouraged in the near by growth centres of Upper Indravati Project and Kolab Projects. (2) Bankable project profiles or these ancillary and other small-scale industries will be prepared within a period of three months, (3) Training of local entrepreneurs will be conducted during the current year, (4) adequate amount of land in the Nawarangapur, Jeypore, Sunabeda, Dharmagarh, Bhawanipatna will be acquired by the IDCO, may have to acquire more land keeping in view the prospects of industries both in organised and small-scale sector. (5) Additional sheds in the industrial estates in Jeypore, Sundabada, Narangpur, Bhawanipatna, Dharmagarh, Norla Road may have to be constructed by the IDCO. (6) IDCO has not only to acquire sufficient land in important centres but also arrange other infrastructural facilities such as power, road etc. (7) The IDCO has to open branch office in Koraput so as to plan for infrastructural development in view of the implementation to these projects and MALCO's project at Damanjodi. (8) The project authorities have to offer land in their premises for grounding the projects. They may have to provide space in their town shops for shopping centres and bringing in servicing units. (9) The project authorities will be involved in different stages of development in the ancillary

in the area. They have to offer positive commitment to place orders with the ancillary units and offer them ancillary status. (10) A creative marketing system has to be evolved. (11) EPM registered units should be given preference. (12) Govt. of India may have to relax the imposition of ban on the items like wire drawing, re-rolling mill and bolts and nuts etc. (13) The State Government may set up at least one re-rolling mill at Jeypore to convert the billets imported by the project authorities of Indravati and Kolab for M. S. Rounds and Flats without waiting for the Government of India's general relaxation on ban. (14) Govt. of India may have to offer special quota of cement for manufacturing Hume pipes and Spun Pipes required by the project authorities. (15) Financing institution have to be involved so that financial assistance in respect of Block and working capital are made available to the selected entrepreneurs. (16) The Mining Department and other connecting agencies may have to help the entrepreneurs for setting up very good units of lime manufacturing, China Clay Washeries, Quartz grinding etc. (17) A task force consisting of the Director of Industries, Managing Director, IDCO Managing Director, OSIC and the concerned D.I.C.'s may be informed immediately to finalise the implementation schedule in regard to development of ancillary and other small scale industries in the area.

32. The following table presents a number of units to be promoted in the various sectors, the quantum of requirement, the cost of project and the employment potential in these two districts of Koraput and Kalahandi.

TABLE
No. of units estimated cost and Employment
Potential under different categories
of SSI units

Sl. No.	Item	No. of units	Cost of the Project	Employment potential
1	2	3	4	5
1	Estimated requirements of ancillary stores required by the Upper Indravati and Upper Kolab Project	29	57,30,000	492
2	Estimated requirement of Ancillary Stores required by the Upper Indravati and Upper Kolab Project	6	5,70,000	33
3	Particulars of Identified consumer goods SSI units in the area	19	7,10,000	107

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6	Cottage based Industries ..	53	99,000	164
7	Artisan based Industries (TRYSEM)	63	26,500	121
Total ..		223	102,05,500	1,246

Agricultural Development

33. Indravati Project has a CCA of 1.20 lakh hectares of which irrigable area is fixed at 1.08 hectares @ 90 per cent of the CCA. The rabi intensity is estimated at 75.5 per cent and 20.5 per cent coverage under the Rabi-summer (3rd crop), with an ultimate annual intensity of 200 per cent on completion of the project. The ayacut area lies between the Dam over river Hati in the South, river Tel in the North, Mundanaha on the West and Sagada nallah on the East. The CCA is distributed over five Blocks of Dharmagarh Sub-Division., Jayapatna, Kalampur, Kokasara, Junagarh and Dharamgarh. The physiography of the area is of rolling type consisting of Att (undulating upland) Mal (high terraced lands) Berna (medium terraced paddy lands) and Baha (Low lying paddy lands in the valley). The soils are mostly of medium textured and black in colour. While the soils of high lands are generally light sandy to sandy loom highly eroded and poor in its fertility status with a moorum layer about 25 cum. to 30 cum. below the surface the medium 20 cum. and low lands are relatively heavy with a layer of 'Kankar' below 30.40 cums. While 'Att' lands account for 46.5 per cent of the cultivable area high, medium and low lands where rice is mostly grown account for 15.0 per cent, 16.4 per cent and 22.1 per cent respectively.

34. The climate of the Command area is of extreme type, May being the hottest and December the coldest month of the year. The average rainfall of the area is 1378 mm. quite erratic in nature 90 per cent of this being received during July to September. August is the wettest month and the precipitation is interrupted by prolonged dry spells causing large scale crop damage due to drought. The Agriculture in the area is chiefly rain-fed with less than 3 per cent served by minor irrigation sources which often function indifferently failing to protect the Kharif crop even by giving one or two life-saving irrigation.

Existing Cropping Pattern

35. In the uplands and high lands crops like Gurji, Ragi, Maize and Rice are grown during Kharif season and after harvest of the crop, the land is left fallow for want of adequate rainfall or residual moisture except in limited areas where Horsegram, Mung, Biri, Niger or Safflower is grown depending upon the soil moisture availability. Along the river banks the land is left fallow in the early monsoon and a crop like Castor, Brinjal, sweet-potato is sown in September availing the residual moisture.

36. In terraced medium lands rice is the main crop in the Kharif season and in areas where irrigation facilities are available, wheat, onion, garlic, mustard and corriender, vegetables etc. are grown during the Rabi season. In the low lands which are invariably terraced rice is grown during the Kharif season and pulses like Mung, Biri etc. follow as 'Peria Crop' (under-sown). Where irrigation facilities are available vegetables, cucumbers, pumpkins, water-melon etc. are grown in small patches.

Suggested Cropping Pattern

37. The high lands, particularly 'Att' lands are unbunded. There is heavy surface run off as well as severe infiltration losses from 'Att' (lands which are generally not banded). Such areas are eminently suited for low water requirement crops and crops which need good drainage. Similarly Mal lands would be the best lands where most of the cash crops can be grown in rotation. Some of the common cropping patterns suggested for different land types with the advent of irrigation is given below :

Type of land	1st Crop (June-Oct)	2nd Crop (Oct-Feb)	3rd Crop (Feb-May)
Att land.	Ragi Maize Mesta Cotton Early paddy (HY) Ragi Vegetables	Potato Mustard Wheat Cotton Wheat — Cotton	Seasum Groundnut Mung — Summer Vegetables —
Mal land	Rice (HY) Maize/Jowar — Sugarcane	Wheat/ Vegetables Cotton —	Pulses/ Sesamum Groundnut —
Barna land	Paddy (H.Y.)	Gram or other Pulses Rice (H.Y.)	Til or vegetables Jute
Bahal land	Rice	Rice (H.Y.)	—

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	Cotton	Cotton	—
	Early paddy (HY)	Wheat	Summer Vegetables
	Ragi	—	—
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38. In the past, cotton has been successfully tried on the uplands under rainfed conditions and area is gradually increasing with the marketing support provided for the Kappas. Farmers are

getting acquainted and interested in this crop. This being a cash crop with good adaptability, it is programmed to advocate cotton as a crop in the uplands of the command area over an area of 25,000 hectares. Different varieties of cotton like MCU 5, SRT-1, JK-HYBRID-I and HYBRID-II have been already tried in different parts of the state and also in the Indravati Ayacut with good response and more of trials are being taken up in the District farm at Argabali which has the typical soil types comparable to those obtaining in the Command area. This proposed area of 25,000 hect. to start with, can feed a modern spinning Mill with 25,000 spindles, providing employment to about 1000 people. Besides, more employment opportunity will be created, this crop being a labour intensive crop. Cotton can also be grown in the adjoining high lands along the periphery of the command as a Kharif crop with one or two supplementary irrigations that can be had from various surface sources including dugwells which will be feasible with the rise of the water table. Cotton can be grown in the medium land after harvest of the kharif crops. Varieties like MCU-5, JK-Hybrid-I, and Hybrid-4 are found suitable for the area. Cotton can also be grown as a mixed crop with pulses like Arhar, Biri, Millets etc. with a better crop intensity and higher scale of farm income.

Water use Management

39. With its rolling topography and heavy nature of soil, drainage problems are imminent in the lower contour particularly in the valleys. Land shaping work to regulate run off to protect the top soil in the unbunded uplands has been suggested. Proper regulation of the water discharge in the outlets also receives attention in order to enable the projected cropping patterns to materialise. In the traditional type of irrigation now prevalent with an outlet for a command of 40 to 100 hectares adopting a duty of 80 to 100 will prevent other medium light duty crops to come up in the command and rice will be the inevitable crop resulting in depletion of productivity over a period of time in the absence of matching drainage programme. Therefore, command development providing field channels and field drains with adequate measures to regulate the outlet flow is envisaged, to form an integral part of irrigation development to support the cropping patterns envisaged, for ensuring optimum utilisation of the irrigation resource accomplishing a high degree of crop intensity. Adequate steps have been suggested to ensure regulated supplies on a rotational basis. The distribution system is expected to take care of this at the initial development stage.

40. At present there is no irrigation facility in the command area to take up promotional measures to popularise irrigated farming practices

for easy switch over to irrigated farming with the water flowing in the canals. Therefore, lift irrigation facilities by way of direct lifts from the rivers and also from tube-wells which can later serve the purpose of augmentation tube-wells which would incidentally depress the water table likely to build up over a short period has been envisaged to be provided from now onwards. Dug wells would also be promoted in the command area which would be of utility during the canal closure period. This will enable popularisation of cropping patterns, introduction of new crops and varieties scope of crop intensification etc. getting over the initial time-lag generally experienced in the full utilisation of the potential in new commands. Special efforts on a project basis are considered necessary to organise compact area on crops like cotton, sugarcane, groundnut, wheat, mustard providing suitable infrastructure. Therefore, additional staff and other organisational support has been envisaged in conformity with the needs of the advance action suggested.

41. Potentialities of developing ground water has been studied in all its aspects. A preliminary survey has indicated that weathered rock underlying the top soil serves as main aquifer for the region. The strategy laid down envisages installation of dug wells, bore wells and dug-cum-bore wells in recommended parts of the area to extend irrigation benefits to the people. Intensive phase of ground water survey of the area is expected to yield details about planning ground water potential on mini water shed basis.

42. Due recognition has been given to promotional measures to popularise irrigated farming practices and for making special efforts on a project basis necessary to organise compact areas on crops like cotton, sugarcane, groundnut, wheat, mustard providing suitable infrastructure. It has been highlighted that technical guidance with financial arrangements to support the investigational needs will have to be ensured. Stress has been laid for providing for subsidies and incentives as are admissible to the small, marginal harijan and tribal farmers in the right earnest and from the initial start itself. Provision of godowns and sale centres for making available the inputs, and also the availability of regulated markets supported by market yards, cartsheds, truck parking places and other market buildings with the necessary financial provision has been given its due.

43. Prospects for encouraging horticultural activities are visualised to be substantial both within the command area and in its periphery where the water table would go up to facilitate easy lift. Fruit tree plantation has been advocated both in the denuded Government lands and private lands. Coconut plantation, along the canal

getting acquainted and interested in this crop. This being a cash crop with wood adaptability, it is programmed to advocate cotton as a crop in the uplands of the command area over an area of 25,000 hectares. Different varieties of cotton like MCU 5, SRT-1, JK-HYBRID-I and HYBRID-II have been already tried in different parts of the state and also in the Indravati Ayacut with good response and more of trials are being taken up in the District farm at Argabali which has the typical soil types comparable to those obtaining in the Command area. This proposed area of 25,000 hect. to start with, can feed a modern spinning Mill with 25,000 spindles, providing employment to about 1000 people. Besides, more employment opportunity will be created, this crop being a labour intensive crop. Cotton can also be grown in the adjoining high lands along the periphery of the command as a Kharif crop with one or two supplementary irrigations that can be had from various surface sources including dugwells which will be feasible with the rise of the water table. Cotton can be grown in the medium land after harvest of the kharif crops. Varieties like MCU-5, JK-Hybrid-I, and Hybrid-4 are found suitable for the area. Cotton can also be grown as a mixed crop with pulses like Arhar, Biri, Millets etc. with a better crop intensity and higher scale of farm income.

Water use Management

39. With its rolling topography and heavy nature of soil, drainage problems are imminent in the lower contour particularly in the valleys. Land shaping work to regulate run off to protect the top soil in the unbunded uplands has been suggested. Proper regulation of the water discharge in the outlets also receives attention in order to enable the projected cropping patterns to materialise. In the traditional type of irrigation now prevalent with an outlet for a command of 40 to 100 hectares adopting a duty of 80 to 100 will prevent other medium light duty crops to come up in the command and rice will be the inevitable crop resulting in depletion of productivity over a period of time in the absence of matching drainage programme. Therefore, command development providing field channels and field drains with adequate measures to regulate the outlet flow is envisaged, to form an integral part of irrigation development to support the cropping patterns envisaged, for ensuring optimum utilisation of the irrigation resource accomplishing a high degree of crop intensity. Adequate steps have been suggested to ensure regulated supplies on a rotational basis. The distribution system is expected to take care of this at the initial development stage.

40. At present there is no irrigation facility in the command area to take up promotional measures to popularise irrigated farming practices

for easy switch over to irrigated farming with the water flowing in the canals. Therefore, lift irrigation facilities by way of direct lifts from the rivers and also from tube-wells which can later serve the purpose of augmentation tube-wells which would incidentally depress the water table likely to build up over a short period has been envisaged to be provided from now onwards. Dug wells would also be promoted in the command area which would be of utility during the canal closure period. This will enable popularisation of cropping patterns, introduction of new crops and varieties scope of crop intensification etc. getting over the initial time-lag generally experienced in the full utilisation of the potential in new commands. Special efforts on a project basis are considered necessary to organise compact area on crops like cotton, sugarcane, groundnut, wheat, mustard providing suitable infrastructure. Therefore, additional staff and other organisational support has been envisaged in conformity with the needs of the advance action suggested.

41. Potentialities of developing ground water has been studied in all its aspects. A preliminary survey has indicated that weathered rock underlying the top soil serves as main aquifer for the region. The strategy laid down envisages installation of dug wells, bore wells and dug-cum-bore wells in recommended parts of the area to extend irrigation benefits to the people. Intensive phase of ground water survey of the area is expected to yield details about planning ground water potential on mini water shed basis.

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banks, has been suggested for command area. Banana, Papaya, Pineapple etc. are proposed to be promoted in the well-drained high lands of the Command area while crops like mango, guava, orange and other fruit plantations are proposed to be taken up along the periphery of the command area with or without lift irrigation facilities. Stress has been laid for identifying mother plants for propagation of desired varieties and for raising of nurseries at convenient central and potential area within the project area and its proximity to ensure a regular supply of different plantation materials.

44. Animal husbandry programme has been planned to develop dairying, poultry, sheep and goat to provide gainful employment opportunities to a large number of beneficiaries in the Project area. Dairy development programme gets a big boost through the introduction of artificial insemination. For implementation of the special cross bred Heifer production and dairy development programme, the pattern of B.A.I.F. Artificial Insemination with Jersey Liquid Semen is being advocated in a phased manner. The area has already been selected after survey basing on concentration of cattle, availability of fodder resources and farmers response to cross breeding and milk production. Appointment of trained and experienced veterinary doctors and supply of frozen semen of high grade Jersey bulls to the proposed centres has been envisaged. For rendering door services and making the doctors more mobile, provision of motor cycles has been made. Details about provision of liquid nitrogen containers, refrigerators, artificial insemination equipment and frozen semen straws has been properly prepared. The procurement of frozen semen, to begin with, has been envisaged from the frozen semen Bull Station at Cuttack and its cost will be subsidised by the State Government. State Government will be subsidising the cost towards each of the successful conception in respect of cows of non-beneficiaries, and treating the cost as loan to the farmers. In case of beneficiaries the I.R.D. agency would provide the subsidy. The programme has been so phased that each centre will become a viable centre of milk collection in a period of 5 years. Under the calf rearing scheme the cross bred female calves born out of artificial insemination would be given feed for a period of 27 months from 2nd month to 28th month of age or till the animal commence milk production whichever is earlier. 50 per cent of the cost of the feed will be subsidised by the I.R.D. agency in respect of cows belonging to small/marginal farmers and 662/3 per cent of the cost will be subsidised for the Heifers belonging to the agricultural labourers as has been provided under Special Livestock Production Programme. Insurance subsidisation has been envisaged for the cross bred Heifers.

Adequate attention has been given to fodder development. It is programmed to take up pasture development on Gochar lands, waste lands and camel embankments besides motivation of farmers to grow fodder on their own lands. For marketing of milk, establishment of good marketing organisation has been envisaged through establishment of Milk Producers Co-operative Societies, network of milk collection from the cattle owners, provision of chilling and processing plants and facilities for converting milk to milk products.

45. In the field of poultry development, encouragement of backyard poultry covering 700 rehabilitated families, supplying each family 20 pullets and one cockrel with loan and subsidy has been envisaged. Besides 70 poultry units each unit comprising of 100 layers will be established over a period of 5 years, at the rate of 2 units in each block per year identifying beneficiaries under E. R. R. P. scheme with 75 per cent subsidy and 25 per cent loan.

46. In case of sheep and goat development, the prevailing pattern indicates popularity of goat development in Kalahandi and of both sheep and goat development in Koraput district. It is programmed to establish 50 Goat units in each Block under E.R.R.P. Programme every year in addition to establishment of 20 units annually in the Blocks of Nawrangpur and Tentulikhunti under I.T.D.A. assistance. In the five blocks of the command area, in addition to the Goat units, it is programmed to establish every year 50 sheep units in each block under E.R.R.P. scheme.

47. For the development of pisciculture in Indravati Project area, it has been estimated that 62 lakh fish seed would be needed. For meeting this demand it is envisaged that construction of a stocking tank-rearing tank-Nursery tank complex of a minimum of 25 acres of water spread within the project area would be desirable for 25 acres of water area, a patch of land of about 40 acres has been estimated. Towards that end long-term lease of the public owned tanks has been envisaged. On account of low water table, deeper excavation of tanks is desirable and this would entail higher cost of excavation. For this purpose it is proposed to raise the rate of subsidy to 75 per cent in case of SC/ST of M. T. & A.I. category. For small farmers subsidy to the tune of 50 per cent and for others the rate of 25 per cent is envisaged.

48. A Special Forestry Project has been drawn up by Orissa Forest Corporation Limited in order to augment the fuel wood species in the command area of Indravati Project located inside Kalahandi district. The project envisages 15 years

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phased programme of different plantation schemes such as (i) creation of village wood lots (ii) re-forestation of degraded forests, (iii) afforestation of barren hills and Podu areas, (iv) activating Gochars and creation of Fodder reserves, and (v) farm forestry.

49. Under Sericulture development programme, mulberry plantation has already been undertaken as part of the Sixth Plan. This is quite a labour-intensive programme and for its proper development, phased programme has been chalked out for the setting up of production centres and provision for the supportive services like thatched rearing and drainage houses, deep wells for irrigation, training etc. has been adequately made as well. After these centres start production, prospective beneficiaries are proposed to be associated for extension. Thereafter steps shall be taken to raise plantations on the plots of identified beneficiaries from Feb-March 1984. A phased programme for 500 acres of mulberry plantation during the Sixth Plan has been detailed under Indravati Project Area.

50. The development in the Project area is going to lead to the creation of some settlement pattern. Towards that end the study of the existing pattern, and the planning of adequate facilities for likely settlements can greatly help in having orderly settlements. Already there has been a hierarchical pattern of settlement system in the

influence zone of the Indravati Project area, covering parts of Koraput and Kalahandi districts. In the existing pattern of settlement there are towns with diversified economic potentials. These towns, owing to existing infrastructural facilities and accelerating economic growth, would immediately receive the impulses of growth components due to Indravati Dam Project. Thereafter 8 towns in Kalahandi district have been identified as the likely towns which could take up immediate development in all spheres of activities. Some of the towns chosen are from outside the Project area as they are seen to act as a reservoir of technical services and skilled workers migration. An overall development of these towns through master plans has been envisaged so that they are not found wanting when developmental needs of the Project Areas so demands. setting up of two Regional Improvement Trusts, for the two districts of Koraput and Kalahandi, are proposed for undertaking all the envisaged programme of work. The hierarchical pattern of settlement envisaged is village, service village, service town, market town, growth point and growth centre. The level of services envisaged for different level of settlements include distributary services; collection and marketing services; rural development (extension work) agricultural credit institutions; industrial development (Corporation); social services (like education, health); law, revenue and judicial govt. depts; transport and communication; and specialised services and skills.

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10. CREDIT

At the instance of the Government of India, the Reserve Bank of India appointed on March 30, 1979 a Committee under the Chairmanship of Shri B. Sivaraman to review the arrangements of institutional credit for agriculture and rural development (CRAFICARD). The terms of reference of this Committee were quite comprehensive. The Committee, in particular, was required to review the structure and operation of the Agricultural Refinance and Development Corporation in the light of the growing need for term loans for agriculture and allied purposes including village industries, marketing, processing and other services relevant to integrated area development, to examine the need for and the feasibility of integrating short-term and medium term credit structure with long-term credit at the National, State, District and Village levels in the context of the intensification of rural development programmes etc.

10.2 CRAFICARD in its report submitted to the Reserve Bank of India in January 1981 has covered rural credit delivery set up at the ground level and the national level in Commercial Banking, Regional Rural Banks as the Corporation Banking System, structural and operational aspects of cooperative credit institutions, etc. comprehensively. Its report consist of 16 chapters, each devoted to a different aspect. The important recommendations, subjectwise are listed below. (Reference within brackets are to the paras in the CRAFICARD Report at pages 390 to 432)—

Reaching the Rural Poor

- (i) The national policy objective of growth with social justice requires that integrated rural development must embrace all the poor households. The normal criterion of banking that a family of rural poor is not credit-worthy will have to give place to the consent that many of the poor can be brought into the mainstream of economic development through credit-worthy programmes. (2.1).
- (ii) For successful implementation of the programmes for the rural poor, it is necessary to identify them as target groups. These are small/marginal farmers, agricultural labourers, rural artisans, scheduled castes and scheduled tribes. The number of rural poor is increasing over the years. Bulk of their borrowing was from private money lenders for consumption purposes for which they have to pay relatively high rates of interests. (2.4 to 2.10).
- (iii) The ARDC definition of small farmer based on income criterion is precise and workable, while the GOI definition based on acreage, aims to restrict subsidy, as a matter of policy, to a smaller number among them, on the principle of (Antyodaya). The credit institutions must ensure that those coming under the GOI definition are given absolute priority. (2.12).
- (iv) Agricultural labourers need help for acquisition of productive assets such as dairy animals and for self-employment in activities such as forestry, animal husbandry, fisheries and processing. (2.13).
- (v) Rural artisans require besides credit, (i) supply of raw materials, (ii) designs based on market preferences, (iii) introduction of improved tools, (iv) upgrading of their skills and (v) marketing arrangements. This is the responsibility of the Government. (2.14).
- (vi) The credit-worthiness of the programme by itself is not sufficient unless the growth of income generated by the programme, over time, takes care of the initial non-productive indebtedness and puts the family on its feet. (2.15).
- (vii) CRAFICARD emphasised that unless the investment in the huge organisation of State Development Administration is made to yield results by more effective coordination, the attack on the problem of rural poverty will remain cosmetic. (2.18).
- (viii) The household will remain the basic unit of poverty eradication programme oriented to target groups. From the point of view of credit institutions it will be useful to classify the poor households into three categories: (a) those who can become viable with loan assistance, (b) those who require some capital subsidy, in addition to loan, to become viable and (c) those who are non-viable and require special assistance from the State more or less

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in the nature of social security. The third category is outside the purview of the credit institutions. (2.20).

- (ix) Different methods of reaching the rural poor need to be evolved. Some sections may have to be approached as well-organised groups such as co-operative societies; some others will have to be dealt with as informal groups so as to facilitate group activity and group lending, yet others have to be approached individually. (2.21).
- (x) CRAFTICARD views the integration inherent in rural development in four dimensions. Combining credit and programmes for (a) comprehensive agriculture (b) tiny, villages and cottage industries, (c) rural services including marketing and (d) infrastructure for production and supporting services. We hope that the Sixth Plan will take care of these aspects. (2.25).
- (xi) CRAFTICARD is of the view that credit to the weaker sections could be facilitated by quicker and simpler method of identification of target groups, simplification of procedures and terms, updating of land records, project-based lending and creation of the requisite infrastructure for ensuring supply of inputs and services. (2.26).

Developmental Role of Credit Institutions in the Indian Rural Context.

- (i) The basic concept of development banking is that credit is consciously used as a liver of development. It calls for initiative and energetic involvement on the part of the bank in developing the the potential opportunities of the undeveloped or under-developed sections or sectors, through selective and strategic input of credit. (3.3).
- (ii) Though there is a forum where governmental agencies and credit institutions meet, coordination in programming and in implementing the programme is generally lacking. (3.7).
- (iii) Depending on the stage of development of and administrative capacities available in the States, credit institutions have to modulate their role. Where the development machinery of the State, particularly at the field level, is not adequate, the credit institutions may

have to play a wider role to shoulder the task of planning rural development. Following from this, they will have to arrange for staffing pattern and lending procedure differently for different areas. (3.25 & 3.26).

Commercial Banking System

- (i) Commercial banks can play a significant role in providing systematic support to ensure forward and backward linkages in the programmes of rural development and help not only in the formulation of DCP but also in its fulfilment. (6.2).
- (ii) In the case of backward and tribal districts, special steps will have to be taken to ensure adequate presence of commercial banks therein to act as catalysts of development. (6.6).
- (iii) Identification of target groups can be done by the departmental authorities on the basis of proper and up-to-date records. Additionally the identification could be done jointly by officials of banks and government. Further, government should also encourage identification being done by banks. Whichever agency does the identification, the beneficiaries should be eligible for the stipulated subsidy and, therefore, the planning mechanism should provide for this. (6.13).
- (iv) In regard to non-land-based activities, state governments will have to play a more direct and active role in devising suitable policies for inputs, services and marketing and in building suitable supporting organisations for all the three items. In these cases, identification of beneficiaries may better be done by government's own agencies. (6.14).
- (v) Since rural lending needs proper field work, we feel that three days in a week should be earmarked for field work (relating to deposit mobilisation, liaison with concerned government staff supervision over end-use of loans, recovery of loans, etc.) All the staff working in the rural branch should be expected and oriented to under-take such work. In this sense, the functions of a rural branch and its staff should be redefined in order to be in tune with the needs of rural development lending. (6.33).

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- (v) Since rural lending needs proper field work, we feel that three days in a week should be earmarked for field work (relating to deposit mobilisation, liaison with concerned government staff supervision over end-use of loans, recovery of loans, etc.) All the staff working in the rural branch should be expected and oriented to under-take such work. In this sense, the functions of a rural branch and its staff should be redefined in order to be in tune with the needs of rural development lending. (6.33).

- (vi) The hours of work of rural branches should be flexible to suit the sowing and harvesting seasons. (6.34)

Cooperatives at the ground level

- (i) In a vast country like ours with diverse conditions, no single or uniform structural pattern applicable all over is feasible.
- (ii) The basic concept underlying FSS and LAMPS is sound and attuned to the problems of the clientele they have to serve. CRAFTICARD has, therefore, urged the State Governments to make vigorous efforts immediately to develop FSS and LAMPS on the lines conceived, so that they can fulfil their objectives within a specified time-span. (5.4).
- (iii) In planning the future of reorganised societies, the aim should be to transform them into a single contact point in the village for all types of credit. They should have the capacity to serve other rural producers such as artisans, craftsmen and agricultural labourers in respect of their economic activities. They have to diversify their functions and augment their resources and business. The Plan must, therefore, provide for classifying PACS according to the progress achieved from time to time and for developing them to the next stage on their onward march to the ultimate goal of a truly multi-purpose service institution for all types of rural producers. This is the most essential objective to be achieved. (5.13).
- (iv) In States where the reorganisation programme has been completed, there should be a time-bound programme, supported by technical assistance from the State Governments, and where necessary, by financial aid from SCBs/CCBs and the State Governments, to vitalise and develop the reorganised societies so that they could evolve themselves into the pattern of FSS in regard to services and operations, over a period of three years. (5.14).
- (v) There should be two categories of membership of societies—one exclusively reserved for the weaker sections distinguished by the lower rate of share capital prescribed for them and the other earmarked for those contributing

share capital at the usual rate. Every one of these two categories of members should be supplied with a pass book in two different colours containing all relevant details. This is to facilitate statistical reporting and analysing and not to dilute the rights of the members belonging to the weaker sections. The entries in the pass book should conform to the entries in the land register and other books of accounts of the society and the validity of entries should be ensured by prompt authentication by the concerned official of the society. (5.15).

- (vi) The need for expansion of training facilities with suitable reorientation to meet the changed situation, particularly, the requirements of integrated rural development is obvious. This is a problem that should be tackled on an urgent footing. The RBI/ARDC/NABARD in collaboration with the NCUI should chalk out a programme for opening more training centres. (5.51).

Field Level Arrangement for District Credit Planning and Co-ordination under Multi-Agency System.

- (i) Achievement of the objectives of integrated Rural development calls for effective cooperation and co-ordination not only between credit institutions but also between the credit institutions on the one hand and the concerned Government and other development agencies, on the other. Therefore, the question of making the field level arrangements for planning and implementing creditbased development effective and adequate assumes great importance. (8.1).
- (ii) It is desirable to make the District Rural Development Agency/Society now being set up in each district, an agency for comprehensive planning and implementation of all the programmes under integrated rural development. (8.22).
- (iii) DCCs should shoulder the responsibilities of identifying the potential for assistance in formulation of new credit schemes, preparation in monitoring the implementation of the credit plans, allocation of responsibilities among various agencies and securing their acceptance examining the factors impeding the flow and recovery of credit, etc. (8.29).

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Supporting Services and Related Action for Successful Rural Lending.

- (i) There should be a close tie-up between technological extension and the disbursement of credit and it is the responsibility of the Government to ensure such a tie-up by suitably deploying the extension personnel and adopting a 'compact area' or 'compact group' approach. (9.4).

National Level Institutions

- (i) CRAFTICARD is of the view that the balance of advantage, in the present context, lies in the setting up of a national level bank with close links with the RBI. The new bank is envisaged as an exercise in decentralisation while the essential controls are retained where they belong, viz. the RBI. (12.12).
- (ii) The new institution be named as the National Bank for Agriculture and Rural Development (NBARD). (12.14).
- (iii) The functions of NBARD would be as follows :—
 - (i) Development policy, planning and operational matters relating to credit for agriculture, allied activities, rural artisans and industries and other rural development activities ;
 - (ii) Training, research and consultancy relating to credit for agriculture and rural development;
 - (iii) Refinance (ST, MT and LT) to the co-operatives and RRBs, including cooperative marketing and distribution;
 - (iv) Refinance to commercial banks against term lending (MT and LT), short-term accommodation for special purposes;
 - (v) Direct lending singly or through consortium arrangements in special cases;
 - (vi) Co-ordination and monitoring of all agricultural and rural lending activities with a view to tying them up with extension and planned development activities in the rural sector;
 - (vii) Inspection of co-operative banks and RRBs; and

- (viii) Advise and guidance to state governments, Federations of Co-operatives, the NCDC etc. in regard to the co-operative movement in close collaboration with the RBI and Central Government.
- (iv) NBARD will be the refinancing agency for the entire rural credit system. Monitoring the use of funds given to this system is better done by NBARD itself. Being an institution within the RBI complex, the statutory inspection by cooperative banks and RRBs may also be taken up by NBARD on an agency basis. The RBI can take occasional test inspection of these banks with a view to satisfying itself that their operations are being carried out in conformity with the provisions of the Banking Laws. (12.17).

Efforts Towards other Improvements in short-term Cooperative Credit Structure

- (i) Since rural development programmes are being undertaken in all the development blocks in the country and financing of all the beneficiaries under the programmes would involve some risks to the financing institutions, the adequacy of existing arrangements to cover the risks to be taken by CCBs and PACs should be examined and adequate arrangements made to cover the risks by additional contribution to their risk funds, or if possible, by bringing them within the scope of the Deposit Insurance and Credit Guarantee Corporation. (15.8).

10.3 CRAFTICARD recommendations are not intended for the backward areas as such but for the overall agricultural and rural development of the country. Their relevance to the development of backward areas, however, is greater. The National Committee endorses the recommendations of the CRAFTICARD in regard to credit arrangements for integrated agricultural and rural development programmes and would strongly urge that the improvements and the streamlining recommended by the CRAFTICARD, once accepted by Government, should be implemented speedily and, on a priority basis, in the backward areas.

10.4 While the above is the broad approach of the National Committee in regard to credit arrangements, there are certain special features of the backward areas like the tribal areas, development of village and cottage industries, small scale industries sector, for which the National Committee had made certain recommendations in its reports on these subjects. The

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10.5 CRAFICARD has given in its report their findings about the functioning of LAMPS in the tribal areas and recommended that the basic concept underlying the LAMPS (Large sized agricultural multipurpose co-operative societies) is sound and tuned to the problems of the clientele they have to serve. CRAFICARD has, therefore, suggested vigorous efforts to develop LAMPS on the lines conceived so that they could fulfil their objectives within a specified time span.

10.6 Considering the importance of the efficient functioning of LAMPS, in the development of tribal areas, the National Committee decided to go into the credit requirements of tribal areas in greater details. Chapter 9 of its report on "Development of Tribal Areas" deals with "Cooperatives in Tribal Areas." In this Chapter, the Committee has attempted to make some concrete suggestions and recommendations for streamlining the working of LAMPS. Some of the important recommendations made therein are listed below. (References within brackets refer to Chapter 9 in its report on "Development of Tribal Areas").

- (i) Performance of LAMPS lags very much behind the Service Cooperative functioning in the non-tribal areas. (9.12 (ii))
- (ii) Although LAMPS have emerged at the primary level, non-LAMP primary societies (old and new) still continue to exist alongwith LAMPS creating confusions. (9.12 (vii)).
- (iii) LAMPS if they have to be effective have to be streamlined and restructured to provide for the following services :—
 - (a) Provision of short-medium and long-term credit for agricultural purposes;
 - (b) Provision for inputs of agriculture like fertiliser, seeds, insecticides, agricultural implements and machinery;
 - (c) Provision of essential domestic requirements like foodgrains, cloth, salt, sugar, vegetable oil

kerosene, matches, tobacco, soap etc. against the member's entitlement under the cash component of the scale of finance or against a limit specifically sanctioned for meeting his consumption needs;

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 - (e) Marketing of agricultural produce or products of allied activities like dairying, poultry keeping etc.
 - (f) Marketing of minor forest produce;
 - (g) Provision of credit for expenses incurred to meet certain social obligations in birth, marriage or death ceremonies;
 - (h) Primary processing of minor forest produce, which will provide employment and additional income to members;
 - (i) Promotion of thrift. (9.13).
- (iv) All these services are necessary in a package to relieve the Scheduled Tribe families from the clutches of the money-lender. Lack of any of these services in an effective manner will only keep the family under the clutches of the money lender and whatever benefits he gets from various development programmes will first be seized of by the money lender. (9.14).
 - (v) LAMPS should be organised only on the basis of one MP per Block in the Tribal Sub-Plan areas. This should be done within a reasonable period of time which may not be more than three years. (9.17).
 - (vi) One Centre for services at the Block level does not meet the requirements of the service centre close to the clients in a cooperative movement. A Block level LAMP should have a sufficient number of branches in order to cater to the rural families as placed close to their place of living. The branch should cover a population of roughly 10,000 or 20,000. (9.15).
 - (vii) The branch will have to be suitably located taking into consideration both the population and the area of operation and in areas with scattered population, it may have to serve a population of less than 10,000. (9.18).

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- (ix) Government of India should prevail upon those State Governments which have not so far re-organised the primary societies on the lines originally conceived to complete the reorganisation within the next one year at the latest. (9.20).
- (x) In Planning the future of reorganised societies, when they get merged with LAMPS, the aim should be to transform into a single compact point in the Block for all types of services envisaged for LAMPS. They should have the capacity to serve all in the Block in respect of their entire range of economic activities and they must diversify their functions and augment the resources and skills. There should be a time-bound programme supported by technical assistance from the State Governments and, where necessary, by financial aid from State Cooperative Banks to vitalise and develop LAMPS so that they are in a position to discharge the functions expected of them. (9.21).
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- (xiv) For the first five years, the cost of the administration both at the Headquarters of the LAMPS and in the branches should be paid for by the Sub-Plan funds on a telescopic scale. (9.25).
- (xv) The Project Officer of the ITDP should be the Chairman of LAMPS in the Block under his projects. The situation may be examined after a period of five years to see that the non-official Chairman should be inducted at that stage. (9.26).
- (xvi) Training of the non-official to take charge of the cooperative system in due course should be the essential part of the Tribal Sub-Plan area. (9.27).
- (xvii) The Committee would urge that a separate cadre should be organised in each State for proper administration of the LAMPS which should draw its personnel, to start with from the concerned departments. An attempt should be made to locate enthusiastic and willing officers and staff from other department's cadres (not only from the cooperative department) and then second to the LAMP cadre for a period of five to seven years. (9.28).
- (xviii) There should be a conscious attempt simultaneously to attract direct recruitment to this cadre so that in course of time the cadre stands on its own feet. (9.29).
- (xix) An attempt should be made to recruit at the lower level suitably qualified tribal people. (9.31).
- (xx) The Board of Directors of the LAMPS should have both official and non-official representation. Two-third of the non-official representation should be from the Scheduled Tribes. (9.33)
- (xxi) The Committee would suggest that necessary action should be taken for debt redemption and after taking over all the liabilities of its members, LAMPS should initiate suitable programmes of development to enable them not only to repay the debt taken over by the LAMPS in suitable instalments but also repay the production

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loans that will be necessary to the member for increasing his productivity. (9.34 & 9.35).

- (xxii) Funds are rarely available for providing consumption credit, as has been pointed out by the CRAFTICARD. It is therefore necessary that this responsibility should be taken over by the necessary credit institutions in the Block and funds should be made available to the LAMPS as a necessary part of their credit coverage for rural development. The Committee would recommend an immediate examination of the position by the Reserve Bank of India and due provision for supporting the LAMPS with the necessary funds for discharging their liabilities under consumption credit. (9.36)*
- (xxiii) A conscious effort should be made by the LAMPS management to see that only such essential items as are mostly needed by the tribals and the poor sections of the community are handled by them on priority basis and only after these needs have been met, they may undertake distribution of non-essential items of tribals and other members provided it is economical. (9.39)
- (xxiv) LAMPS must buy from their members not only the traditional produce but also purchase products of such other activities which may be instituted by pursuance of diversified approach. (9.41)
- (xxv) LAMPS must pay a purchase price which is reasonable and which cannot be offered to by the average private trader and middlemen now operating in the area. (9.42)
- (xxvi) The Committee does not recommend any change in the existing linkages of LAMPS for credit purposes and the present practice should continue. The consumption institutions should, however ensure adequate and smooth flow of funds to LAMPS and provide the necessary guidance, supervision and also do the monitoring etc. (9.44)
- (xxvii) LAMPS should be made the agents of the LDBs of the areas concerned invariably to provide long-term credit in the LAMPS area of operation. No

parallel Land Development Banks should be allowed to have any operation in the same area. (9.45)

- (xxviii) Inputs should be made available to the LAMPS for distribution to its members on a consignment and commission basis and all expenses incurred thereon, whether transportation, storage etc. must be borne by the supply agency. (9.46)
- (xxix) The Project Authorities and Block Development Agencies should provide technical and extension support. The Committee is not in favour of recommending separate extension and technical staff in the LAMPS. (9.47)
- (xxx) The Committee would recommend that whichever the apex organisation in the State for a particular items of produce and which is entrusted with this responsibility in the State must undertake to lift all the produce purchased by the LAMPS at the price fixed by it on the lines discussed by the Committee. (9.48)

10.7 The Committee in its report on Village and Cottage industries has pointed out that the credit requirements for procuring and supplying raw materials to the artisans will be fairly substantial.

(Para 5.26)

It has further recommended a group centre approach for the development of village, cottage and tiny industries under the overall supervision and coordination of the IDP, setting up of a District Supply and Marketing Society for supply of raw materials as well as providing the marketing support at the District level and creation of a State Rural Industries Supply and Marketing Corporation to handle scarce and imported raw materials, supply and marketing support to the village, cottage and small industries at the State level.

10.8 In its report referred to in para 7, the Committee has dealt with this aspect. Important recommendations are listed below :

- (i) The proposed DSMS should supply raw materials and buy sufficient goods to cover the instalment and the capital loan for the equipment as well as for the raw materials supplied by it. The artisans in the group need not take any loan for this raw materials. If the

- loans that will be necessary to the member for increasing his productivity. (9.34 & 9.35).
- (xxii) Funds are rarely available for providing consumption credit, as has been pointed out by the CRAFTICARD. It is therefore necessary that this responsibility should be taken over by the necessary credit institutions in the Block and funds should be made available to the LAMPS as a necessary part of their credit coverage for rural development. The Committee would recommend an immediate examination of the position by the Reserve Bank of India and due provision for supporting the LAMPS with the necessary funds for discharging their liabilities under consumption credit. (9.36)*
- (xxiii) A conscious effort should be made by the LAMPS management to see that only such essential items as are mostly needed by the tribals and the poor sections of the community are handled by them on priority basis and only after these needs have been met, they may undertake distribution of non-essential items of tribals and other members provided it is economical. (9.39)
- (xxiv) LAMPS must buy from their members not only the traditional produce but also purchase products of such other activities which may be instituted by pursuance of diversified approach. (9.41)
- (xxv) LAMPS must pay a purchase price which is reasonable and which cannot be offered to by the average private trader and middlemen now operating in the area. (9.42)
- (xxvi) The Committee does not recommend any change in the existing linkages of LAMPS for credit purposes and the present practice should continue. The consumption institutions should, however ensure adequate and smooth flow of funds to LAMPS and provide the necessary guidance, supervision and also do the monitoring etc. (9.44)
- (xxvii) LAMPS should be made the agents of the LDBs of the areas concerned invariably to provide long-term credit in the LAMPS area of operation. No parallel Land Development Banks should be allowed to have any operation in the same area. (9.45)
- (xxviii) Inputs should be made available to the LAMPS for distribution to its members on a consignment and commission basis and all expenses incurred thereon, whether transportation, storage etc. must be borne by the supply agency. (9.46)
- (xxix) The Project Authorities and Block Development Agencies should provide technical and extension support. The Committee is not in favour of recommending separate extension and technical staff in the LAMPS. (9.47)
- (xxx) The Committee would recommend that whichever the apex organisation in the State for a particular items of produce and which is entrusted with this responsibility in the State must undertake to lift all the produce purchased by the LAMPS at the price fixed by it on the lines discussed by the Committee. (9.48)
- 10.7 The Committee in its report on Village and Cottage industries has pointed out that the credit requirements for procuring and supplying raw materials to the artisans will be fairly substantial. (Para 5.26)
- It has further recommended a group centre approach for the development of village, cottage and tiny industries under the overall supervision and coordination of the IDP, setting up of a District Supply and Marketing Society for supply of raw materials as well as providing the marketing support at the District level and creation of a State Rural Industries Supply and Marketing Corporation to handle scarce and imported raw materials, supply and marketing support to the village, cottage and small industries at the State level.
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Banks give artisans accommodation for giving advance for the purchase of raw materials, the accounts will be settled where the DSMS takes back the goods. The Committee has therefore suggested that DSMS should be authorised to give composite loans to artisans both for purchasing equipment and raw materials and it should be the responsibility of the DSMS to recover instalments of these loans by buying the produce in sufficient quantity.

- (ii) As DSMS and the SRIDC has to provide raw materials to artisans, at cheap rates, these organisations should be enabled by the Reserve Bank to get its ways and means credit for this purpose at cheap rates equal to those given to the cooperative system. The Committee hopes that with the setting up of the proposed National Bank for Agricultural and Rural Development it would be possible if that organisation support these two organisations on par for the necessary funds for supporting artisans classes. Till that happens, a method will have to be found to give cheap credit to the DSMS and the SRIDC and the Committee would urge that this should be considered as on priority basis and answers found early by the Central Government.
- (iii) At present there is no mechanism to ensure that the Banks charge differential

interest from the TRYSEM trainees. In fact, reports indicate that rate of 9 to 11 per cent are being charged. The Committee has recommended that the Banks should be liberal in their approach and, if necessary, the interest rates should be subsidised so that the effective rates charged from the rural artisans does not exceed the DRI interest rates.

10.9 In our report on Industrial Organisation, we have dealt with the problem of the small scale entrepreneurs in tying up of the term loan with working loan (para 5.5 to 5.7). At present there is the composite loan scheme covering both term loan and working capital upto Rs. 25,000. However, this scheme has not made much headway. The concept of a composite loan is good and needs to be pursued. The Committee has further recommended that the scheme should be run through the DIC and SFC. The authority to sanction the loan should rest with DIC as an agent of the SFC and the SFC should be eligible for refinancing from the IDBI for the amounts disbursed. The required amendments in the charters of the SFC and IDBI would have to be made. The limit for the composite loan should be raised to Rs. 50,000 and be kept under review so that it can be increased suitably as prices rise.

10.10 The Committee has further recommended that sanctions for projects requiring Rs. 50,000 to Rs. 2 lakhs should be available at local level office of the SFC and for the term loan the concerned commercial bank branch.

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11. RURAL MARKETING

The Committee has used the term "Rural Marketing" as covering all aspects of marketing of the agricultural and allied products including the market structure system, both functional and institutional, based on technical and economic considerations and includes pre and post harvest operations, assembling, grading, storage, transportation and distribution. The need for providing an appropriate marketing system for promoting rural, particularly agricultural development, cannot be over-emphasised. If the surplus produce does not move to the market to bring due return to the farmers, it could be disincentive to increased production. Similarly, if the system does not supply foodgrains and other agricultural commodities such as soils, fruits, vegetables, milk, meat, eggs, etc. at reasonable prices to consumers at the time and place needed by them, increased production has no meaning.

11.2 Marketing in our country starts traditionally either in the village or in the nearest "Haat" or "Shandy" where the goods are exchanged into cash. As per an estimate made by the Directorate of Marketing and Inspection in 1979, there are a large number of such primary markets. Their number is estimated at 22,000 situated mostly in rural areas, generally transacting business once or twice in a week and catering to the needs of the majority of the producers. These are owned by local bodies like Panchayats, Revenue Departments or private parties. Although the owners levy some fee, they hardly take any interest to provide even the elementary facilities like sanitation, water supply, etc. By and large, these markets are devoid of most of the marketing facilities and are generally nothing but strips of land serving as the meeting place of the buyers and sellers. There is practically no supervision over the transactions and the producers generally do not get a fair deal.

11.3 In addition, there are wholesale assembling markets in all the States and Union Territories and their number is about 5,000. By the end of March, 1979, a total number of 4,345 markets in various States had been brought under the purview of the regulated markets. Annexure-11.1 indicates the number of markets regulated in the country in different States and Union Territories as on 31-3-1979.

11.4 The objectives of an efficient marketing system are:—

- (a) to enable the primary producers to get the best price ;

- (b) to provide facilities for lifting of produce which the producers are willing to sell at a reasonable price ;
- (c) to reduce the price spread between the primary producers and ultimate consumers ; and
- (d) to make available all products of farm origin to consumers at a reasonable price without impairing the quality of the produce.

11.5 The need for orderly marketing was felt as far back as in 1928 by the Royal Commission on Agriculture which made important recommendations for the improvement of agricultural and rural economy. The Commission recommended that there should be a central organisation to study the problems in the field and suggest remedies. Consequently, the Government of India appointed an Agricultural Marketing Adviser in 1935 and set up a central office of the Agricultural Marketing Adviser to the Government of India. This has now come to be known as the Directorate of Marketing and Inspection located at Nagpur and Faridabad. The Agricultural Produce Grading and Marketing Act was enacted in 1957 and the Directorate took up the work of quality control. Foundations of orderly development of agricultural marketing were thus laid before the planning area.

11.6 A number of marketing development programmes were initiated during the First and Second Five Year Plans such as Cooperative Marketing, Market News, Standardisation of Weights and Measures, Forward Markets, Warehousing, Grading and Standardisation, Market Regulation and Training of Marketing Personnel. During the Third Five Year Plan, special attention was given to survey, research and investigation on the various aspects of agricultural marketing. The Fourth Five Year Plan laid emphasis on the development of infrastructure facilities in the assembling markets apart from markets research and investigations. The Fifth Five Year Plan continued the programme of development of markets with considerably increased outlay along with the survey and research programmes and grading services.

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Meghalaya, Nagaland, Sikkim, Andamans and Nicobar Islands, Arunachal Pradesh, Dadra Nagar Haveli, Mizoram and Lakshadweep. In Kerala, regulation of markets is confined to Malabar area under the Madras Commercial Crops Act. Annexure 11.2 indicates the States and Union Territories where the Agricultural Produce Markets Acts are in force. Annexure 11.3 indicates the rate of market fee charged by Market Committees in different States.

11.8 In so far as commodities notified for the purpose of regulation are concerned, some commodities of great commercial value like livestock and livestock products, fruits and vegetables are still kept out of the purview of regulation in many of the States and the producers of these commodities are, therefore, deprived of the benefits of regulation. The National Commission on Agriculture had recommended that "it is necessary to notify for regulation not only foodgrains, but also commercial crops, fruits and vegetables, livestock and livestock products and minor forest products as a general rule (Para 56.1.5) (Part XII) of its Report". Although the National Commission made this recommendation in 1976, the position still remains as indicated earlier.

11.9 It has also been observed that there is no uniformity in regard to the enforcement of regulation in various States. In some States, the mode and level of enforcement differ even from one market committee to the other. In some States where some regulatory measures have been effectively enforced, tangible benefits have been derived by the market-users, more especially the producers. In many of the other markets, it has not been found possible to enforce the regulation effectively due to a number of reasons. The Working Group on Agricultural Marketing and Role of Regulated Markets appointed in 1978, to examine the present position and to suggest an approach during the Sixth Five Year Plan has estimated that more than one-fifth of the marketable surplus does not enter the assembling market, but gets disposed of either at the village or at the primary market level. The position is still worse in respect of commercial crops. In the case of cotton and jute, where practically the entire production becomes marketable surplus, a very high proportion (roughly 50% in the case of cotton and 75% in the case of jute) does not enter the assembling market at all. Annexure 11.4 indicates the production and estimated market arrivals of rice and wheat from villages into the wholesale assembling markets, while Annexure 11.5 gives a similar information on selected commercial crops. Annexure 11.6 gives

Statewise distribution of wholesale assembling markets in selected States (1975-76). It would thus be seen that notwithstanding all the efforts taken and investments made so far in organising and developing the assembling markets, roughly one fifth of the marketable surplus in the case of food crops and half to three-fourths in the case of commercial crops do not seem to be coming to the assembling market at all. A well-developed and properly organised assembling market is expected to attract farmers, simultaneously discouraging sales at the villages where the chances of the producer being exploited are much more. The success of an assembling market is to be measured by the extent to which it is made use of by the producers. There could be many reasons for the continued large scale disposal of farm produce at the village level, more important being the absence of well-organised assembling market within a reasonable distance of the production point and lack of basic facilities and amenities in the assembling market. There has so far been no concerted effort for development of marketing infrastructure in most of the States. The Government of India during the Fourth Plan had provided financial assistance for development of market yards under various programmes like Area Development Programme for Command Area, SFDA, MFAL etc. Besides, a separate central sector scheme with an outlay of Rs. 2 crores was implemented during the Fourth Plan for providing grant-in-aid to regulated markets in some States like U. P., Bihar, Rajasthan, Orissa, West Bengal and Madhya Pradesh. Actually, the implementation of the scheme was tardy and only Rs. 23 lakhs were spent in 21 markets. The scope of this scheme was expanded during the Fifth Five Year Plan with an outlay of Rs. 12.5 crores to cover the markets situated in command areas, markets handling predominantly commercial crops, markets located in economically backward areas in all the States and terminal markets for fruits and vegetables. During the period 1974-75 to 1979-80, a total amount of Rs. 805.25 lakhs has been provided as grants-in-aid to 289 markets.

11.10 As the markets located in tribal, hilly, drought prone and other economically backward areas and primary markets situated in rural areas were not in a position to derive any financial assistance under this scheme, a separate programme with an outlay of Rs. 500 lakhs for providing financial assistance in the form of grant-in-aid exclusively to these categories of markets was formulated for implementation during the last two years of the Fifth Plan. During 1977-78 to 1979-80, Rs. 610.50 lakhs and Rs. 199.30 lakhs were provided as grants-in-aid for development of 646 primary rural

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markets and 67 wholesale rural markets situated in the hilly, tribal and drought-prone areas respectively. Besides, some States also received assistance from the International Development Agency of IBRD.

11.11 A critical review of the progress made in the development of markets, conducted by the Directorate of Inspection and Marketing in the Ministry of Rural Reconstruction, indicates that the pace of development is not uniform in all the States. In States where there is a proper marketing organisation at the State level like an independent Department of Agricultural Marketing and/or a State Agricultural Marketing Board, with necessary machinery for acquisition of land, planning and supervising the development of markets, the progress has been quite satisfactory. In other cases, the progress is tardy. Even though it was intended to give weightage to the north-eastern region of the country for providing aid under the central sector programme, that region has not been able to derive any benefit from this programme due to lack of a proper organisation. The States, where there is no proper machinery at the State level, it is seen that the work relating to selection of markets, drawing up of the project and construction of market yards has been left to the individual market committees. As a result, there is no uniform criteria for market development nor any attempt to select the markets properly with a view to draw an integrated project for development. Instead, proposals in respect of isolated cases prepared by the Market Committees are being received for consideration of Central assistance. As the market committees do not have the required expertise to prepare such development projects, the proposals received in many cases are not found suitable for grant of financial assistance. Presently, many of the markets are situated in congested localities and do not have enough space for proper development. It is necessary that adequate land is acquired for taking up the development. Acquisition of adequate land has posed a great problem in States where there is no proper machinery for locating suitable sites and initiating action for acquisition of purchase of land. As the Central assistance provided forms only a part of the cost of the project, the Market Committees covered under this programme are required to find additional funds from other sources like loan from commercial banks, grant from State Government or State Marketing Board, etc. for completing the development work. Since the development of markets had not received the priority that it deserves from financial institutions like ARDC, commercial banks as well as the State Governments, many of the

Market Committees have not been in a position to raise the necessary additional funds required for completing the project in time and as a result the development of the market yard remains incomplete for a long time. The National Commission on Agriculture had recommended that "To ensure orderly marketing, each market should have an adequate yard, an administrative block to provide accommodation to the officials of the market committee, market functionaries, post office, a telephone office, bank and a trading floor"

(para 56.1.5 (v)).

11.12 The situation has, however, somewhat changed since then and the loans provided to market committee for the development programme by commercial banks are now eligible for re-financing by the Agricultural Re-finance and Development Corporation and this has given a boost to the programme.

11.13 The main source of income to a market committee is the market fee. The annual income depends upon the rate of market fee and the volume of produce traded within the confines of the market area. Annexure-III indicates the rate of market fee presently levied by the market committees in the different States. There is considerable variation in the rate of market fee from State to State. At the one end is Haryana and Punjab where the fee is collected at the rate of 3% *ad valorem*. At the other end is Gujarat where the fee is as low as 0.1 to 0.4% *ad valorem*. As a result there is wide variation in the annual income of market committees in the different States. The average annual income per market in Punjab is as high as Rs. 14.73 lakhs. On the other hand, the average income per market in Gujarat is as low as Rs. 78,000 only.

11.14 Some market committees have filed cases in the High Courts regarding the levy of market fees. It is desirable that the Ministry of Rural Reconstruction should look into the question of levy of market fees and give general guidance as to what should constitute a reasonable market fee which should provide adequate income not only to cover the running cost but also essential developmental facilities including internal roads, which limits the producers using the markets.

11.15 An examination of the State-wise distribution of secondary markets (Annexure 11.6) shows that there is a great diversity from State to State in the average area or population served by a market. For the country as a whole a secondary market serves, on an average, an area of 775 sq. kilometers and a population of 1.32

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11.14 Some market committees have filed cases in the High Courts regarding the levy of market fees. It is desirable that the Ministry of Rural Reconstruction should look into the question of levy of market fees and give general guidance as to what should constitute a reasonable market fee which should provide adequate income not only to cover the running cost but also essential developmental facilities including internal roads, which limits the producers using the markets.

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lakhs. As against this, there is a market in Punjab for every 168 sq. kilometers as compared with one for every 1866 sq. kilometers in Himachal Pradesh and one for every 7500 sq. kilometers in Meghalaya. Similarly there is a market in Punjab for every 45,000 population as against one for every 2.96 lakh population in Kerala. The situation in the backward areas, is bound to be still worse.

11.16 In backward areas, particularly, tribal, hilly and drought-prone areas, most of the villages have to rely on "shandies" or haats". The traders come from the town, assemble for the day and disperse by the evening. They bring cloth and general merchandise usually of low quality but charge higher rates and the produce of the villagers is invariably purchased at very cheap rates. In addition to periodical haats or shandies, there are the town based hawkers of consumer goods who visit the villages from door to door. The goods sold by them are also inferior and often represent imitations. There are no scruples absented in the matter of prices charged. There are representatives of big traders who also visit villages periodically and enter into bargain with producers for purchasing their commodities, once again to the disadvantage of the latter. In short, an average villager is almost always a loser whether in purchasing or in selling. There are many instances where the differential between village and assembling market prices was significant. If a villager chooses to come to town despite distance, he has to undergo fatigue and waste his time—transport, journey expenses and even then he cannot be certain of a fair deal. This picture must change in order to enthuse confidence in the producer for a better and promising future for himself and it is only then that he would wholeheartedly undertake to produce more. Any amount of efforts to increase the productivity of the backward areas would be infructuous unless the producer is assured of an incentive return on his produce.

11.17 What is thus needed is that a regulated market should not be far away from the village. It will be ideal if this facility could be created at a place as near as possible and in general within a radius of 5 kms., a distance negotiable by foot or cart within an hour. It is with this background that the Committee has recommended the concept of a focal point approach in the backward areas in Chapter 8. At present, the existing shandies or markets are meeting this requirement in the manner described in the preceding para. What is needed in future is that these should operate every day during the

specified hours instead of only once a week as at present, and must also be brought under regulation.

11.18 In the absence of any dependable data available at present about the volume of commodities traded and number of buyers and sellers, which would naturally influence the market revenue, it is very difficult for the Committee to make any positive recommendation or even to expect that all the Shandies and Haats in the backward areas would get converted into full-fledged assembly markets. The Committee would, however, recommend that wherever focal point approach is adopted, priority should be given either to convert the "Shandy", where existing, into a regulated market or where no stand or haat exists to set up a new regulated market. It is not necessary that the focal point should have a full-fledged assembly market. Depending on the volume of the commodities traded and the number of buyers and sellers, the Integrated Area Development Authority may decide which of the Shandies should be converted into full-fledged markets; the others can then be converted into submarkets linked to the nearby regulated markets in a phased manner. The National Commission on Agriculture had recommended certain minimum facilities, to start with, in these sub-markets and assembly markets (Para 56.1.2) which are indicated below:—

- (i) Physical facilities for grading, weighing and storage should be available in the market.
- (ii) There should be an agency which should take charge of the cultivator's produce, advance him money for his immediate needs, process the produce, arrange for further marketing at the next point and then make final payment.
- (iii) An alternative of personal dealing and disposal should also be available to the cultivator.
- (iv) There should be means of communication for market information i.e. Post and Telegraph Office with a provision for telephone.
- (v) Shops selling production inputs and domestic necessities should be available to the producer in the localities where markets are situated.
- (vi) Facility of inter-village and intra-village road communication should exist in the proposed market area.

The Committee would endorse the above recommendations as it considers that these are the minimum facilities required.

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- (vi) Facility of inter-village and intra-village road communication should exist in the proposed market area.

The Committee would endorse the above recommendations as it considers that these are the minimum facilities required.

11.19 The Committee would suggest that in the backward areas, there should be at least one regulated market in each project to which the assembly and sub-markets could be linked. It would also suggest that steps should be taken immediately, where necessary, to notify the commodities which have not yet been covered under the market legislation, particularly, cash crops, livestock, livestock products, fruits and vegetables.

11.20 Ordinarily, the market income should be sufficient not only to meet the operational expenditure but also the cost of development. The Committee is not generally in favour of governmental grants as the markets must function on commercial principles in all respects. At the same time, the Shandies/Haats, which are to be developed either as assembly markets or sub-markets, and majority of which are likely to be below the level of taluka headquarters, would require to be treated on special footing by providing necessary finances to improve their physical facilities and working capital. These assembling markets and sub-markets may not be able to devote necessary funds for providing physical facilities in the initial stages.

11.21 A number of States like Andhra Pradesh, Karnataka, Gujarat and Maharashtra have made provisions for providing financial assistance to develop those markets which are not in a position to undertake developmental activities from their own resources. These States have created a "Central Market Fund" for this purpose to which the market committees contribute a certain percentage of their income, as prescribed under the Rules, and Government contributes to the Fund every year a sum which is equal to the amount of contribution made by the market committee. In addition, there are certain schemes administered by the Ministry of Rural Reconstruction under which certain selected markets are given financial assistance to the extent of 50% of the cost for building basic infrastructure. The Sixth Five Year Plan thus makes a provision of assisting 750 rural primary markets and 150 rural wholesale markets situated in tribal, hilly and drought-prone areas. The Committee would strongly urge that all State Governments should create a "Market Development Fund" to which the market committees in the State should contribute a certain percentage of market revenue and the State Governments contribute matching grants. With this Fund and the assistance available from the Central Government it could be possible to develop existing Shandies/Haats into assembling markets or sub-markets during the Sixth Five Year Plan. Priority naturally will have to be given to the markets located in the backward areas for financial assistance.

Marketing Institutions

11.22 The main job for the assembling market and the sub-markets is how to take over the responsibility of the produce of the farmer and give in the best benefits and amenities, without subjecting him to the intricacies of market transactions. It is here that the cooperative marketing societies as well as the Central Organisations like the Food Corporation of India, the Cotton Corporation of India and the Jute Corporation of India can play an important role.

11.23 Cooperative marketing and processing of a large number of commodities has been tried since long as an answer to the problem of low returns to the producers. Good results have also been achieved in certain regions. The cotton cooperatives in South Gujarat and in Gadag-Hubli area of Karnataka, the sugarcane cooperative in Maharashtra, the potato marketing cooperatives in Himachal Pradesh and the Danpur Jute Marketing Cooperative in Orissa are some of the examples in this regard. These cooperatives have been able to provide not only new competition in situations where the existing traders charged too high a price for their services or foundings, but also have been able to increase the bargaining power of the producers and secure for them increased returns by reducing marketing costs and also by eliminating the profits that were being absorbed by the monopolistic trade. However, as reported by the Working Group on Agricultural Marketing and Role of Regulated Markets, "the success achieved by these few instances is contrasted by the general failure of cooperative marketing societies in most other areas to make any significant impact owing to variety of reasons". Cooperative marketing would have to receive a high priority in any scheme of marketing improvement programmes. Cooperation among the producers can help in taking advantage of largescale transport and marketing which may be difficult to do for growers individually. There is also scope for reducing handling costs through the use of cooperatively owned equipment and improving sales returns through joint action. The small and marginal farmers are facing a number of problems in bringing their surpluses for sale in the mandies. They generally prefer to sell their produce to village merchants at their door steps. It would be useful if the cooperative societies in rural areas are enabled to undertake the collection of produce from the small and marginal farmers at village level and arrange for its transport to mandies for sale. In the non-tribal areas, it should be the endeavour of the Integrated Area Development Authority to ensure cooperative marketing and processing. The public sector agencies like the Food Corporation

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of India, the Jute Corporation of India and the Cotton Corporation of India can also help co-operative marketing in those areas by having suitable link-up with them and ensuring that the goods procured by them are lifted, thereby reducing any unnecessary burden on these cooperative systems.

11.24 The Committee would also recommend that the present procurement agencies like the Food Corporation of India, the Jute Corporation of India and the Cotton Corporation of India etc. should strengthen their relationship with the cooperative structure and encourage them to perform this purchasing activity rather than maintaining too many purchasing points of their own. The endeavour of the State Government should be to develop the cooperative marketing structure and its apex organisations so as to make them more effective tools in building up an efficient rural marketing system, and strengthen the functional bonds between the apex bodies at the State level and the concerned national institutions, wherever they exist.

11.25 It is not desirable to provide only one channel of transactions, however, laudable that might be. It is better to provide an alternative channel also to a producer so that he could be free to make his own choice of dealings. The important functionaries, normally operating in markets, are brokers, commission agents and traders, and outside markets mostly traders. The activities of these functionaries, some of whom perform useful roles, can be continued to be made available as an alternative after streamlining with necessary controls. At present, all the three functionaries are licensed in the regulated markets, but it is not so in other markets. The Committee would recommend licensing of all market functionaries compulsorily without exception. Also, in view of the limited service rendered, brokers should be phased out from the market; they could be persuaded to become commission agents. The weighing of produce should be done by the market committees. Only produce graded and weighed should be handed over to the commission agents according to the choice of the producers/sellers. The practice of commission agent making payment to the producer-seller is not a sound practice and a system of payment through banks located in all regulated markets has to be regularised.

Storage

11.26 The Committee need hardly state the obvious that the present extent of storage losses in foodgrains and other commodities is quite high. Commodities have to be stored at farm

level before marketing at market level, at processing plants and at the level of wholesale and retail trading. Farmers usually store only foodgrains for purposes such as consumption, seed for sowing, payment in kind to labourers, and also some quantities for sale at a later date. The majority of the farmers do not store commercial crops such as cotton, jute, etc. and they usually dispose them off as early as possible for want of immediate cash, particularly in the backward areas. Producers of fruit, vegetables, livestock products and fish sell the produce immediately since they are perishable and need cold storage facilities.

11.27 Majority of farmers store their produce either in bulk or in hessian bags. The produce is usually stored in dwelling houses in tin drums, specially improvised big earthenware, pucca kothas, underground mud-walled or concretised cellars and RCC bins. A number of improved storage structures have since been introduced. This is due to the efforts made by the various research institutes. The Indian Standards Institute has also laid down standards for some of the metal bins. The Committee would recommend that improved methods of storage at the farmer's level should be popularised.

11.28 As regards storage of marketed produce, there is already an Agricultural Produce Development and Warehousing Corporation, Act, 1956. Apart from the Central Warehousing Corporation, set up 1957, to construct and operate warehouses, State Warehousing Corporations have also been established in almost all the States. Similarly, other Central Government organisations, as also the State Government organisations, have their own storage capacities. There is need for special efforts to construct storages in rural areas, i.e., at each of the assembly or sub-market centres, suitably linking them with the storage facilities at the wholesale and terminal markets. This is quite important in the case of backward areas. Each committee, whether it is an assembly or a sub-market centre must have its own storage facilities. These committees can, however, only provide a limited storage capacity. It is essential that proper linkages should be provided for the cooperative and other procurement agencies to store the produce purchased by them from these sub-markets.

Cold Storage

11.29 Cold storage plays a very important role in the preservation of fruits, vegetables, meat and meat products, fish, milk and milk products. It not only helps the producers to store their produce to get a better price, but also saves them from the loss. It is, therefore, essential that, depending on the production potential and the need for sale, each Integrated Development

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Authority should be sure that adequate cold storage facilities are available at some of the selected points.

Processing

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11.31 As regards the agro processing industries, the Committee would invite attention to its detailed recommendations in regard to the development of agro processing industries in para 8.53 to 8.56 of its report on "Industrial Dispersal". An Agro processing unit is best located at a central point of production of the particular agricultural produce. The regulated and other markets can play a very important role in this regard. What the Committee would suggest is to organise the necessary agro processing industries at the market yard or nearby which is the collecting centre for the produce. The recommendation made in the report referred to earlier need to be pursued.

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Statement Showing Number of Markets Regulated in India as on 31st March, 1979

Sl. No.	State/UT	Number of Regulated Market		Total
		Principal Market	Sub-Market Yards	
1	2	3	4	5
A States having legislation				
1	Andhra Pradesh	203	297*	500
2	Assam	4	10	14
3	Bihar	118	320	438
4	Gujarat	119	154	273
5	Haryana	87	88	175
6	Himachal Pradesh	6	24	30
7	Karnataka	115	197	312
8	Kerala	4	—	4
9	Madhya Pradesh	250	67	317
10	Maharashtra	227	282	509
11	Manipur	—	—	—
12	Orissa	36	30	66
13	Punjab	100	360	460
14	Rajasthan	112	166	278
15	Tamil Nadu	176	29	205
16	Uttar Pradesh	251	366	617
17	Tripura	1	—	1
18	West Bengal	35	81	116
B Union Territories having Legislation				
19	Chandigarh	1	1	2
20	Delhi	4	4	8
21	Goa, Daman & Diu	1	2	3
22	Pondicherry	1	—	1
C States having no Legislation				
23	Jammu and Kashmir	—	—	—
24	Meghalaya	—	—	—
25	Nagaland	—	—	—
26	Sikkim	—	—	—
D Union Territories having no legislation				
27	Andaman & Nicobar	—	—	—
28	Arunachal Pradesh	—	—	—
29	Dadra & Nagar Haveli	—	—	—
30	Lakshadweep	—	—	—
31	Mizoram	—	—	—
GRAND TOTAL		1,860	2,485	4,345

Note : *297 are sub-markets yards in case of Andhra Pradesh subject to amendment to be brought by the States in the Act as there is no provision of sub-market yards.

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Agricultural Produce Markets Acts in force in various States and Union Territories

S. No.	State/UT			Act in force
1	2			3
1	Andhra Pradesh	..	..	.. The Andhra Pradesh (Agricultural Produce Livestock) Marketing Act, 1966.
2	Assam	..	..	.. The Assam Agricultural Produce Market Act, 1872.
3	Bihar	..	..	.. The Bihar Agricultural Produce Markets Act, 1961.
4	Haryana	..	..	.. The Punjab Agricultural Produce Market Act, 1961.
5	Gujarat	..	..	.. The Gujarat Agricultural Produce Market Act, 1963.
6	Himachal Pradesh	..	..	.. The Himachal Pradesh Agricultural Produce Market Act, 1969.
7	Karnataka	..	..	.. The Karnataka Agricultural Produce Marketing (Regulation) Act, 1966.
8	Kerala	..	..	.. The Madras Commercial Crops Market Act, 1933.
9	Madhya Pradesh	..	..	.. The Madhya Pradesh Krishi Upaj Mandi Abhiniyan, 1972.
10	Maharashtra	..	..	.. The Maharashtra Agricultural Produce Marketing (Regulation) Act, 1966.
11	Manipur	..	..	.. The Bihar Agricultural Produce Markets Act, 1960.
12	Orissa	..	..	.. The Orissa Agricultural Produce Markets Act, 1956.
13	Punjab	..	..	.. The Punjab Agricultural Produce Markets Act, 1961.
14	Rajasthan	..	..	.. The Rajasthan Agricultural Produce Markets Act, 1961.
15	Tamil Nadu	..	..	.. The Tamil Nadu Agricultural Produce Markets Act, 1959.
16	Tripura	..	..	.. The Bombay Agricultural Produce Markets Act, 1939.
17	Uttar Pradesh	..	..	.. The Uttar Pradesh Krishi Utpadan Mandi Abhiniyam, 1964.
18	West Bengal	..	..	.. The West Bengal Agricultural Produce Marketing (Regulation) Act, 1972.
B Union Territories				
1	Chandigarh	..	..	.. The Punjab Agricultural Produce Markets Act, 1961.
2	Delhi	..	..	.. The Delhi Agricultural Produce Markets (Regulation) Act, 1976.
3	Goa, Daman & Diu	..	..	.. The Maharashtra Agricultural Produce Marketing (Regulation) Act, 1963.
4	Pondicherry	..	..	.. The Pondicherry Agricultural Produce Markets Act, 1973.

Agricultural Produce Markets Acts in force in various States and Union Territories

S. No.	State/UT			Act in force
1	2			3
1	Andhra Pradesh	..	..	.. The Andhra Pradesh (Agricultural Produce Livestock) Marketing Act, 1966.
2	Assam	..	..	.. The Assam Agricultural Produce Market Act, 1872.
3	Bihar	..	..	.. The Bihar Agricultural Produce Markets Act, 1961.
4	Haryana	..	..	.. The Punjab Agricultural Produce Market Act, 1961.
5	Gujarat	..	..	.. The Gujarat Agricultural Produce Market Act, 1963.
6	Himachal Pradesh	..	..	.. The Himachal Pradesh Agricultural Produce Market Act, 1969.
7	Karnataka	..	..	.. The Karnataka Agricultural Produce Marketing (Regulation) Act, 1966.
8	Kerala	..	..	.. The Madras Commercial Crops Market Act, 1933.
9	Madhya Pradesh	..	..	.. The Madhya Pradesh Krishi Upaj Mandi Abhiniyan, 1972.
10	Maharashtra	..	..	.. The Maharashtra Agricultural Produce Marketing (Regulation) Act, 1966.
11	Manipur	..	..	.. The Bihar Agricultural Produce Markets Act, 1960.
12	Orissa	..	..	.. The Orissa Agricultural Produce Markets Act, 1956.
13	Punjab	..	..	.. The Punjab Agricultural Produce Markets Act, 1961.
14	Rajasthan	..	..	.. The Rajasthan Agricultural Produce Markets Act, 1961.
15	Tamil Nadu	..	..	.. The Tamil Nadu Agricultural Produce Markets Act, 1959.
16	Tripura	..	..	.. The Bombay Agricultural Produce Markets Act, 1939.
17	Uttar Pradesh	..	..	.. The Uttar Pradesh Krishi Utpadan Mandi Abhiniyam, 1964.
18	West Bengal	..	..	.. The West Bengal Agricultural Produce Marketing (Regulation) Act, 1972.
B Union Territories				
1	Chandigarh	..	..	.. The Punjab Agricultural Produce Markets Act, 1961.
2	Delhi	..	..	.. The Delhi Agricultural Produce Markets (Regulation Act, 1976)
3	Goa, Daman & Diu	..	..	.. The Maharashtra Agricultural Produce Marketing (Regulation) Act, 1963.
4	Pondicherry	..	..	.. The Pondicherry Agricultural Produce Markets Act, 1973.

Rate of Market Fee Charged by Market Committees in different States

S. No.	States										Rate of Fee (Per cent ad valorem)	
1	2										3	
1	Haryana	..	..	..	..	..	..	..	..	..	..	3.0
2	Punjab	..	..	..	..	..	..	..	..	..	..	3.0
3	Karnataka	..	..	..	..	..	..	..	..	..	..	2.0
4	Andhra Pradesh	..	..	..	..	..	..	..	..	..	..	1.0
5	Assam	..	..	..	..	..	..	..	..	..	..	1.0
6	Himachal Pradesh	..	..	..	..	..	..	..	..	..	..	1.0
7	Bihar	..	..	..	..	..	..	..	..	..	..	1.0
8	Rajasthan	..	..	..	..	..	..	..	..	..	..	1.0
9	Uttar Pradesh	..	..	..	..	..	..	..	..	..	..	1.0
10	West Bengal	..	..	..	..	..	..	..	..	..	..	1.0
11	Maharashtra	..	..	..	..	..	..	..	..	..	..	0.5
12	Madhya Pradesh	..	..	..	..	..	..	..	..	..	..	0.5
13	Tamil Nadu	..	..	..	..	..	..	..	..	..	..	0.25 to 0.45
14	Orissa	..	..	..	..	..	..	..	..	..	..	0.25
15	Gujarat	..	..	..	..	..	..	..	..	..	..	0.10 to 0.40

Rate of Market Fee Charged by Market Committees in different States

S. No.	States										Rate of Fee (Per cent ad valorem)	
1	2										3	
1	Haryana	..	..	..	..	..	..	..	..	..	..	3.0
2	Punjab	..	..	..	..	..	..	..	..	..	..	3.0
3	Karnataka	..	..	..	..	..	..	..	..	..	..	2.0
4	Andhra Pradesh	..	..	..	..	..	..	..	..	..	..	1.0
5	Assam	..	..	..	..	..	..	..	..	..	..	1.0
6	Himachal Pradesh	..	..	..	..	..	..	..	..	..	..	1.0
7	Bihar	..	..	..	..	..	..	..	..	..	..	1.0
8	Rajasthan	..	..	..	..	..	..	..	..	..	..	1.0
9	Uttar Pradesh	..	..	..	..	..	..	..	..	..	..	1.0
10	West Bengal	..	..	..	..	..	..	..	..	..	..	1.0
11	Maharashtra	..	..	..	..	..	..	..	..	..	..	0.5
12	Madhya Pradesh	..	..	..	..	..	..	..	..	..	..	0.5
13	Tamil Nadu	..	..	..	..	..	..	..	..	..	..	0.25 to 0.45
14	Orissa	..	..	..	..	..	..	..	..	..	..	0.25
15	Gujarat	..	..	..	..	..	..	..	..	..	..	0.10 to 0.40

Production and estimated market arrivals of Rice and Wheat from Villages into wholesale assembling markets

State	Rice				Wheat			
	Production		Market arrivals as per cent of production		Production		Market arrivals as per cent of production	
	1974-75 ('000 tons)	1975-76 ('000 tons)	1974-75	1975-76	1974-75 ('000 tons)	1975-76 ('000 tons)	1974-75	1975-76
	2	3	4	5	6	7	8	9
Andhra Pradesh	5,700	6,451	30.2	36.5	—	—	—	—
Assam	1,984	2,290	6.5	11.2	—	—	—	—
Bihar	4,559	4,855	20.2	14.9	2,000	2,297	16.5	16.0
Gujarat	178	572	51.8	44.8	734	1,151	39.2	35.5
Haryana	392	625	70.9	85.4	1,954	2,428	29.8	4.2
Himachal Pradesh	—	—	—	—	—	—	—	—
Karnataka	2,080	2,259	14.3	18.9	320	281	11.9	14.1
Kerala	1,334	1,365	8.2	8.2	—	—	—	—
Madhya Pradesh	2,409	3,844	13.7	16.9	2,352	2,751	24.5	33.1
Maharashtra	1,408	2,255	6.2	6.1	776	1,260	32.6	31.9
Orissa	3,166	4,532	1.7	6.9	—	—	—	—
Punjab	1,181	1,447	89.3	92.3	5,300	5,788	16.3	50.8
Rajasthan	100	224	25.5	33.3	1,819	2,290	23.4	20.7
Tamil Nadu	4,166	5,203	39.3	46.0	—	—	—	—
Uttar Pradesh	3,489	1,294	18.1	28.9	7,176	8,553	26.7	26.3
West Bengal	6,543	6,866	15.2	17.5	—	—	—	—
TOTAL	38,689	47,082	21.6	25.8	22,431	26,779	30.5	31.7
ALL INDIA	40,253	43,740	21.6	25.8	21,134	28,346	30.5	31.7

NOTE (—) Market arrivals are not significant and as such, corresponding production figures are also not shown.

Source : Directorate of Economic and Statistics.

Production and estimated market arrivals of Rice and Wheat from Villages into wholesale assembling markets

State	Rice				Wheat			
	Production		Market arrivals as per cent of production		Production		Market arrivals as per cent of production	
	1974-75 ('000 tons)	1975-76 ('000 tons)	1974-75	1975-76	1974-75 ('000 tons)	1975-76 ('000 tons)	1974-75	1975-76
1	2	3	4	5	6	7	8	9
Andhra Pradesh	5,700	6,451	30.2	36.5	—	—	—	—
Assam	1,984	2,290	6.5	11.2	—	—	—	—
Bihar	4,559	4,855	20.2	14.9	2,000	2,297	16.5	16.0
Gujarat	178	572	51.8	44.8	734	1,151	39.2	35.5
Haryana	392	625	70.9	85.4	1,954	2,428	29.8	4.2
Himachal Pradesh	—	—	—	—	—	—	—	—
Karnataka	2,080	2,259	14.3	18.9	320	281	11.9	14.1
Kerala	1,334	1,365	8.2	8.2	—	—	—	—
Madhya Pradesh	2,409	3,844	13.7	16.9	2,352	2,751	24.5	33.1
Maharashtra	1,408	2,255	6.2	6.1	776	1,260	32.6	31.9
Orissa	3,166	4,532	1.7	6.9	—	—	—	—
Punjab	1,181	1,447	89.3	92.3	5,300	5,788	16.3	50.8
Rajasthan	100	224	25.5	33.3	1,819	2,290	23.4	20.7
Tamil Nadu	4,166	5,203	39.3	46.0	—	—	—	—
Uttar Pradesh	3,489	1,294	18.1	28.9	7,176	8,553	26.7	26.3
West Bengal	6,543	6,866	15.2	17.5	—	—	—	—
TOTAL	38,689	47,082	21.6	25.8	22,431	26,779	30.5	31.7
ALL INDIA	40,253	48,740	21.6	25.8	24,184	28,846	30.5	31.7

NOTE (—) Market arrivals are not significant and as such, corresponding production figures are also not shown.

Source : Directorate of Economic and Statistics.

Production and estimated market arrivals from village of selected commercial crops (1974-75 to 1976-77)

States	Production in 000 tonnes			Arrivals in '000 tonnes			Arrivals as percentage of Productions		
	1976-77	1975-76	1974-75	1976-77	1975-76	1974-75	1976-77	1975-76	1974-75
	2	3	4	5	6	7	8	9	10
(i) Cotton									
Andhra Pradesh ..	42.4	40.4	82.1	27.2	27.7	61.7	64.15	68.6	75.15
Gujarat ..	277.2	285.1	247.3	60.6	71.4	106.8	21.86	25.0	43.2
Haryana ..	80.9	79.2	72.4	28.1	26.2	41.2	34.7	33.1	56.9
Karnataka ..	129.2	99.7	134.8	79.6	62.4	117.4	61.6	62.6	87.1
Madhya Pradesh ..	48.9	72.2	72.2	14.0	13.4	28.1	28.6	18	38.9
Maharashtra ..	141.5	132.8	291.8	52.9	24.0	101.2	37.39	18.1	34.7
Punjab ..	193.5	212.5	203.8	149.9	202.1	148.6	77.5	95.3	72.9
Rajasthan ..	59.2	68.7	57.2	53.6	42.7	43.1	90.5	62.15	75.4
Tamil Nadu ..	52.6	65.6	46.6	103.7	39.5	22.8	197.15	60.2	48.9
Uttar Pradesh ..	2.7	3.0	3.2	10.0	2.4	4.0	370.4	80.0	125.0
All India ..	982.8	1,037.1	1,216.4	571.7	511.7	675.0	58.2	49.3	55.5
(ii) Jute									
Assam ..	14.6	8.3	13.4	neg.	0.08	0.02	neg.	0.96	0.20
Bihar ..	108.4	110.2	98.3	42.1	90.5	77.4	38.8	82.1	78.7
Manipur ..	126.7	130.1	148.5	0.02	1.9	4.0	0.02	1.5	2.7
Orissa ..	neg.	neg.	neg.	23.4	10.5	15.6	neg.	neg.	neg.
Tripura ..	72.8	52.3	60.0	2.2	2.3	2.5	3.02	4.4	4.2
Uttar Pradesh ..	6.6	8.3	9.0	3.8	1.7	6.5	57.5	20.5	72.2
West Bengal ..	1,625.2	483.5	469.4	104.3	83.3	96.2	16.7	17.2	20.5
All India ..	962.4	799.1	804.7	175.7	190.4	202.3	18.2	23.8	25.1
(iii) Groundnut									
Andhra Pradesh ..	595.5	1,158.9	1,414.7	257.5	397.7	476.5	43.2	34.2	33.7
Gujarat ..	1,898.4	2,034.6	465.0	191.4	220.2	93.2	10.1	10.8	20.0
Haryana ..	10.4	11.8	8.0	0.5	0.5	0.4	4.8	4.2	5.0
Karnataka ..	336.7	627.7	666.7	174.4	251.2	283.9	51.8	40.0	42.6
Madhya Pradesh ..	303.6	362.5	290.2	99.0	142.8	108.6	32.6	39.4	37.4
Maharashtra ..	605.2	670.9	516.5	190.5	220.6	162.7	31.43	32.0	31.5
Punjab ..	151.0	177.0	141.0	41.7	78.1	43.2	27.6	44.1	30.6
Rajasthan ..	156.5	172.7	180.5	41.0	41.3	38.1	26.20	23.9	21.1
Tamil Nadu ..	828.7	1,271.7	776.1	188.4	207.4	222.4	22.7	16.3	28.6
Uttar Pradesh ..	231.4	318.0	360.1	124.8	239.1	271.1	63.9	75.2	75.3
All India ..	5,262.4	5,111.0	4,980.7	1,209.2	1,799.0	1,700.1	24.9	35.2	34.1
(iv) Rapeseed and Mustard									
Bihar ..	47.4	54.7	48.2	17.3	30.0	39.0	36.5	54.84	80.9
Gujarat ..	37.3	26.4	28.3	83.0	76.5	72.8	222.5	290.15	257.2
Haryana ..	67.0	65.0	137.0	35.1	32.3	22.3	52.4	49.7	16.28
Madhya Pradesh ..	48.1	127.1	142.1	66.5	82.1	36.6	138.25	64.6	25.8
Punjab ..	46.1	78.0	140.0	49.8	50.1	41.4	108.03	73.63	22.2
Rajasthan ..	102.1	146.0	254.6	90.2	107.5	56.6	88.34	73.63	22.2
Uttar Pradesh ..	1,050.0	1,275.0	1,323.9	301.7	379.2	298.0	28.73	29.74	22.5
All India ..	1,561.8	1,936.0	2,251.8	469.8	643.6	757.8	30.1	33.24	33.7

Source : Directorate of Economic & Statistics.

Production and estimated market arrivals from village of selected commercial crops (1974-75 to 1976-77)

States	Production in 000 tonnes			Arrivals in '000 tonnes			Arrivals as percentage of Productions				
	1976-77	1975-76	1974-75	1976-77	1975-76	1974-75	1976-77	1975-76	1974-75		
	2	3	4	5	6	7	8	9	10		
				(i) Cotton							
Andhra Pradesh ..	42.4	40.4	82.1	27.2	27.7	61.7	64.15	68.6	75.15		
Gujarat ..	277.2	285.1	247.3	60.6	71.4	106.8	21.86	25.0	43.2		
Haryana ..	80.9	79.2	72.4	28.1	26.2	41.2	34.7	33.1	56.9		
Karnataka ..	129.2	99.7	134.8	79.6	62.4	117.4	61.6	62.6	87.1		
Madhya Pradesh ..	48.9	72.2	72.2	14.0	13.4	28.1	28.6	18	38.9		
Maharashtra ..	141.5	132.8	291.8	52.9	24.0	101.2	37.39	18.1	34.7		
Punjab ..	193.5	212.5	203.8	149.9	202.1	148.6	77.5	95.3	72.9		
Rajasthan ..	59.2	68.7	57.2	53.6	42.7	43.1	90.5	62.15	75.4		
Tamil Nadu ..	52.6	65.6	46.6	103.7	39.5	22.8	197.15	60.2	48.9		
Uttar Pradesh ..	2.7	3.0	3.2	10.0	2.4	4.0	370.4	80.0	125.0		
All India ..	982.8	1,037.1	1,216.4	571.7	511.7	675.0	58.2	49.3	55.5		
				(ii) Jute							
Assam ..	14.6	8.3	13.4	neg.	0.08	0.02	neg.	0.96	0.20		
Bihar ..	108.4	110.2	98.3	42.1	90.5	77.4	38.8	82.1	78.7		
Manipur ..	126.7	130.1	148.5	0.02	1.9	4.0	0.02	1.5	2.7		
Orissa ..	neg.	neg.	neg.	23.4	10.5	15.6	neg.	neg.	neg.		
Tripura ..	72.8	52.3	60.0	2.2	2.3	2.5	3.02	4.4	4.2		
Uttar Pradesh ..	6.6	8.3	9.0	3.8	1.7	6.5	57.5	20.5	72.2		
West Bengal ..	1,625.2	483.5	469.4	104.3	83.3	96.2	16.7	17.2	20.5		
All India ..	962.4	799.1	804.7	175.7	190.4	202.3	18.2	23.8	25.1		
				(iii) Groundnut							
Andhra Pradesh ..	595.5	1,158.9	1,414.7	257.5	397.7	476.5	43.2	34.2	33.7		
Gujarat ..	1,898.4	2,034.6	465.0	191.4	220.2	93.2	10.1	10.8	20.0		
Haryana ..	10.4	11.8	8.0	0.5	0.5	0.4	4.8	4.2	5.0		
Karnataka ..	336.7	627.7	666.7	174.4	251.2	283.9	51.8	40.0	42.6		
Madhya Pradesh ..	303.6	362.5	290.2	99.0	142.8	108.6	32.6	39.4	37.4		
Maharashtra ..	605.2	670.9	516.5	190.5	220.6	162.7	31.43	32.0	31.5		
Punjab ..	151.0	177.0	141.0	41.7	78.1	43.2	27.6	44.1	30.6		
Rajasthan ..	156.5	172.7	180.5	41.0	41.3	38.1	26.20	23.9	21.1		
Tamil Nadu ..	828.7	1,271.7	776.1	188.4	207.4	222.4	22.7	16.3	28.6		
Uttar Pradesh ..	231.4	318.0	360.1	124.8	239.1	271.1	63.9	75.2	75.3		
All India ..	5,262.4	5,111.0	4,980.7	1,309.2	1,799.0	1,700.1	24.9	35.2	34.1		
				(iv) Rapeseed and Mustard							
Bihar ..	47.4	54.7	48.2	17.3	30.0	39.0	36.5	54.84	80.9		
Gujarat ..	37.3	26.4	28.3	83.0	76.5	72.8	222.5	290.15	257.2		
Haryana ..	67.0	65.0	137.0	35.1	32.3	22.3	52.4	49.7	16.28		
Madhya Pradesh ..	48.1	121.1	142.1	66.5	82.1	36.6	138.25	64.6	25.8		
Punjab ..	46.1	78.0	140.0	49.8	50.1	41.4	108.03	73.63	22.2		
Rajasthan ..	102.1	146.0	254.6	90.2	107.5	56.6	88.34	73.63	22.2		
Uttar Pradesh ..	1,050.0	1,275.0	1,323.9	301.7	379.2	298.0	28.73	29.74	22.5		
All India ..	1,561.8	1,936.0	2,251.8	469.8	643.6	757.8	30.1	33.24	33.7		

Source : Directorate of Economic & Statistics.

State-wise distribution of wholesale assembling markets in selected states (1975-76)

Sl. No.	State/UT			No. of whole-sale Markets	Area in 000 Sq. kms.	Area served by a market (Average Sq. kms.)	Population (Million)	Population served by a market (million)	Total production of major agril. commodities ('000 tonnes)	Average production covered by each market ('000 tonnes)
1	2			3	4	5	6	7	8	9
1	Andhra Pradesh	..	..	349	277	793	43.4	0.124	9,340.0	26.6
2	Assam	..	..	108	100	926	14.9	0.138	2,567.5	23.7
3	Bihar	..	..	427	174	408	56.3	0.131	10,561.0	24.7
4	Gujarat	..	..	350	196	560	26.7	0.076	6,836.6	19.5
5	Himachal Pradesh	..	..	30	56	1,866	3.4	0.113	5,371.4	41.5
6	Haryana	..	..	109	344	341	10.0	0.077	5,371.4	41.5
7	Jammu & Kashmir	..	..	N.A.	222	—	4.6	—	1,023.1	—
8	Kerala	..	..	72	39	541	21.3	0.296	6,959.8	96.6
9	Madhya Pradesh	..	..	311	444	1,427	41.6	0.134	12,747.9	41.0
10	Maharashtra	..	..	571	308	540	50.3	0.088	7,217.2	12.6
11	Karnataka	..	..	239	192	803	29.3	0.122	7,999.0	33.4
12	Nagaland	..	..	N.A.	17	—	0.5	—	54.1	—
13	Orissa	..	..	100	156	1,560	21.9	0.219	5,471.4	54.7
14	Punjab	..	..	311	50	168	13.5	0.045	8,957.1	23.8
15	Rajasthan	..	..	217	342	1,567	25.7	0.118	7,280.9	33.4
16	Tamil Nadu	..	..	150	130	867	41.1	0.274	9,840.3	65.6
17	Uttar Pradesh	..	..	438	294	674	88.4	0.201	25,650.0	53.5
18	West Bengal	..	..	183	88	480	44.4	0.241	10,259.1	56.0

State-wise distribution of wholesale assembling markets in selected states (1975-76)

Sl. No.	State/UT		No. of whole-sale Markets	Area in 000 Sq. kms.	Area served by a market (Average Sq. kms.)	Population (Million)	Population served by a market (million)	Total production of major agril. commodities ('000 tonnes)	Average production covered by each market ('000 tonnes)
1	2		3	4	5	6	7	8	9
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2	Assam	108	100	926	14.9	0.138	2,567.5	23.7
3	Bihar	427	174	408	56.3	0.131	10,561.0	24.7
4	Gujarat	.. ..	350	196	560	26.7	0.076	6,836.6	19.5
5	Himachal Pradesh	.. ..	30	56	1,866	3.4	0.113	5,371.4	41.5
6	Haryana	.. ..	109	344	341	10.0	0.077	5,371.4	41.5
7	Jammu & Kashmir	.. ..	N.A.	222	—	4.6	—	1,023.1	—
8	Kerala	.. ..	72	39	541	21.3	0.296	6,959.8	96.6
9	Madhya Pradesh	.. ..	311	444	1,427	41.6	0.134	12,747.9	41.0
10	Maharashtra	.. ..	571	308	540	50.3	0.088	7,217.2	12.6
11	Karnataka	.. ..	239	192	803	29.3	0.122	7,999.0	33.4
12	Nagaland	.. ..	N.A.	17	—	0.5	—	54.1	—
13	Orissa	.. ..	100	156	1,560	21.9	0.219	5,471.4	54.7
14	Punjab	.. ..	311	50	168	13.5	0.045	8,957.1	23.8
15	Rajasthan	.. ..	217	342	1,567	25.7	0.118	7,280.9	33.4
16	Tamil Nadu	.. ..	150	130	867	41.1	0.274	9,840.3	65.6
17	Uttar Pradesh	.. ..	438	294	674	88.4	0.201	25,650.0	53.5
18	West Bengal	.. ..	183	88	480	44.4	0.241	10,259.1	56.0

12. ORGANISATION AND ADMINISTRATION

In the previous chapter the National Committee has outlined a strategy for the development of different types of backward areas. The effective implementation of this strategy will require substantial strengthening and streamlining of administration as well as changes in the modalities of financing and implementation of development projects. The field visits undertaken by the members of the Committee showed clearly the gaps in administration and coordination at the field level in backward areas. The National Committee recognised the importance of this aspect and therefore dealt with it in its very first report on Organisation of Administrative and Financial Structure for Backward Area Development.

12.2 The role of administration in backward areas is very substantial. Many of these areas have a low level of education, are difficult of access and suffer from environmental and other constraints on development. There is also a lack of private initiative. There are no social or other agencies which can take on the task of modernisation and the responsibility for initiating the tasks of development has to rest with administration.

12.3 The basic tasks of administration are essentially coordination and planning. Input supply, the organisation of credit, in various services which are required, research support, field and a variety of other tasks have also to be performed. The administrative system can take on these tasks but if it does so, it may be over-stretching itself. These tasks of supply of input and services must be performed by specialised institutions so that administration can concentrate on its core responsibilities for planning and coordination.

12.4 Most of the Committee's recommendations on organisation and administration are contained in its first report referred to earlier. The recommendations listed in this chapter are essentially a summary of some important points from that report. However, before dealing with these recommendations, it may be useful to highlight the importance of administration as an input into development.

Importance of Administration—A Case Study

12.5 The role that administration plays in the successful implementation of development programmes is not very easy to quantify. The best

that can be done is a qualitative analysis, comparing areas which are otherwise similar but which appear to differ in the quality of administration and pattern of organisation. The Centre for Policy Research undertook such a study in which the two areas chosen for comparison were Karnal and Gorakhpur. The report on this study brings out the role that administration can play in development.*

12.6 From the point of view of agro-climatic conditions and development potential, Karnal and Gorakhpur are very similar. Yet, their respective performance in relation to agricultural development is very different. The Intensive Agriculture Area Programme (IAAP) was taken up in Gorakhpur and the Intensive Agricultural District Programme (IADP) in Karnal. The two programmes differed slightly in their staff structure but both depended on a project coordinator who was supposed to have control over programmes. The Centre for Policy Research undertook field investigations with reference to the whole gamut of activities for agricultural development under these programmes in the two districts. Their findings are given below.

12.7 The organisational study of the IADP, Karnal seems to have greater cohesion than the IAAP in Gorakhpur. In Karnal, the organisational strategy was described as "highly pragmatic and result oriented". A clear cut division was made between extension functions and supply functions, the latter being handled by autonomous organisations. The supply of inputs like improved seeds, chemical fertilizers, pesticides was handled by a single organisation called the Haryana State Cooperative Supply and Marketing Federation (HAFED) in Karnal. As against the four different agencies were involved in input supply functions in Gorakhpur. All arrangements relating to credit are wholly in the charge of district central cooperative bank in Karnal, the Departmental officers being entirely free from these functions. The supply of all agricultural implements and machinery is handled by the Haryana Agro-Industries Corporation. Thus, all the officials of the agriculture department, plant protection division and cooperative department associated with the implementation of agricultural development programme in Karnal are free from supply functions and devote their time and attention to extension work. As against this, the corresponding

*"Development Bureaucracy" by V.A. Pai Parandikar, R. N. Bishnoi and O. P. Sharma, Centre for Policy Research, Dharma Marg, Chanakyapuri, New Delhi, March 1981.

12. ORGANISATION AND ADMINISTRATION

In the previous chapter the National Committee has outlined a strategy for the development of different types of backward areas. The effective implementation of this strategy will require substantial strengthening and streamlining of administration as well as changes in the modalities of financing and implementation of development projects. The field visits undertaken by the members of the Committee showed clearly the gaps in administration and coordination at the field level in backward areas. The National Committee recognised the importance of this aspect and therefore dealt with it in its very first report on Organisation of Administrative and Financial Structure for Backward Area Development.

12.2 The role of administration in backward areas is very substantial. Many of these areas have a low level of education, are difficult of access and suffer from environmental and other constraints on development. There is also a lack of private initiative. There are no social or other agencies which can take on the task of modernisation and the responsibility for initiating the tasks of development has to rest with administration.

12.3 The basic tasks of administration are essentially coordination and planning. Input supply, the organisation of credit, in various services which are required, research support, field and a variety of other tasks have also to be performed. The administrative system can take on these tasks but if it does so, it may be over-stretching itself. These tasks of supply of input and services must be performed by specialised institutions so that administration can concentrate on its core responsibilities for planning and coordination.

12.4 Most of the Committee's recommendations on organisation and administration are contained in its first report referred to earlier. The recommendations listed in this chapter are essentially a summary of some important points from that report. However, before dealing with these recommendations, it may be useful to highlight the importance of administration as an input into development.

Importance of Administration—A Case Study

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officials in Gorakhpur were actively involved in the procurement, storage and distribution of the various inputs as well as the provision of the working of the cooperative societies and stores. This left them little time for extension work.

12.8 The input supply function seemed to be better organised in Karnal, which, even though it is smaller and more compact than Gorakhpur, had more sale depots. The cooperative organisation was also stronger in Karnal where there was one cooperative society for every three villages against one for every 14 villages in Gorakhpur.

12.9 Apart from the separation of supply and extension functions the second major difference between Karnal and Gorakhpur was that there was a single line of command in the implementation of agricultural development programmes in Karnal as against compartmentalisation function of the programme in Gorakhpur. All the officials associated with the programme at all levels were under the administrative control of a Deputy Director of Agriculture in Karnal. In Gorakhpur, on the other hand, there was a separate and parallel set up for agricultural extension, plant protection, cooperation and minor irrigation with independent heads of offices at the district level.

12.10 The third major difference was that the district head of the Agriculture Department in Karnal had an absolutely independent status and was not subordinate to any other district level officer barring the Deputy Commissioner. In Gorakhpur, on the other hand, the District Agricultural Officer is under the administrative control of the ADM (Development).

12.11 Both districts had district level coordination committees for reviewing the progress of agricultural development programme but according to the study, Karnal Committee was more effective. About 91% of all officials in Karnal expressed varying degree of satisfaction (from 'very effective' to 'somewhat effective') as far as inter-departmental coordination was concerned. The corresponding percentage in Gorakhpur was only 21%.

12.12 The study also indicated that the transport facilities available to the Deputy Director of agriculture, Karnal were far more than what was available to the district agricultural officer, Gorakhpur even though Gorakhpur is twice the size of Karnal.

12.13 Arrangements for technology also seemed to be better in Karnal. There was a full-fledged information unit with a whole time Agricultural Information Officer and audio visual van, various

kinds of equipment and literature in Karnal. There was no such unit or any kind of arrangement in Gorakhpur. Karnal had a regular programme of training for extension workers as well as cultivator. In Gorakhpur, on the other hand, there was no regular and systematic orientation of field workers and practically no liaison between the farmer's training centres and the district agricultural administration in the selection and training of cultivators. According to the report "In the sheer range of methods used for motivating the people Karnal far excelled Gorakhpur".

12.14 Many problems of administration arise not from organisational features but from the skills and capabilities of the personnel. The Policy Research Centre Study made an attempt to assess differences on this account. The most significant difference was in the educational qualification of the village level officials of the two districts. Whereas all such officials in Karnal were holders of Bachelor or Master's Degree in Agriculture, not a single village level official in Gorakhpur had graduate or post-graduate qualification in agriculture science. At the overall level also, the difference was marked and the percentage of officials possessing a degree in agricultural science was 62% in Karnal as against 29% in Gorakhpur. With regard to job experience, the study found that 39% of all officials in Karnal had an effective job experience of 10 years against 11% in Gorakhpur. One significant difference is that in Gorakhpur village level workers put in 16.9 years of service on the same post on an average as against 7-8 years in Karnal. This suggests a great deal of stagnation in Gorakhpur.

12.15 The officials in Karnal appear to be better informed about the programme under implementation in the district than in Gorakhpur. According to the study, 80% of the officials in Karnal had a full understanding of the role whereas the corresponding percentage in Gorakhpur was 60%. The proportion of district and block level officials who have had head of office status was not very different. However, it is worth nothing that 70% of the district heads of office in Karnal felt that the delegation of financial powers was adequate whereas corresponding percentage in Gorakhpur was only 36%.

12.16 The frequency of field visits and the number of cultivators contacted was higher in Karnal than in Gorakhpur, the average number of cultivators contacted by officials being 390 in Karnal and 240 in Gorakhpur. Officials in Karnal appeared to be more prompt in initiating action within a week of their visit to villages.

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12.17 A significant difference between the two districts seems to be in the involvement of local officials in programme planning. The study found that 92% of all officials in Karnal were associated with programme planning as against 61% in Gorakhpur. It is significant that all VLWs in Karnal were associated with programme planning whereas only 21% of their counterparts in Gorakhpur had any such association. Freedom of expression also seems to be more in Karnal where one-third of the officials felt free in expressing their opinion as against 17% in Gorakhpur. There was none in Karnal who did not feel free at all whereas 31% in Gorakhpur felt that they were not free to express their views. It is significant that 80% of all officials in Karnal felt that the attitude of seniors was positively helpful. In Gorakhpur, on the other hand, 23% felt that it was positively helpful and as many as 33% stated that it was generally indifferent. Our administrative system has elaborate rules of procedure which departments simplified. The study has found that 75% of officials in Gorakhpur felt handicapped by rules and regulations whereas only 24% of them expressed the sense of handicapped in Karnal.

12.18 The Centre for Policy Research also contacted a sample of cultivators to find out what their response was to development programmes. With regard to the effectiveness of extension education the study found that the block officials were the largest single source of motivation for use of improved seeds in Karnal while in Gorakhpur the largest single source of motivation was the category of 'other cultivators'. Whereas 42% of all cultivators in Karnal were motivated by block officials, only 26% of the cultivators were so motivated in Gorakhpur. The study also found that the interaction of block officials was the major source of motivation for medium and large cultivators whereas the demonstration method was the most important factor for small cultivators. The situation with regard to the use of chemical fertilisers is also similar. For plant protection measures, though they were not as widespread, the principal source of motivation was block officials. Block officials also seemed to play an important role when it came to the use of improved implements and machinery.

12.19 The study also examined the reaction of cultivators visits by block officials and contacts with bureaucracy. A very small proportion of cultivators had contact with block officials during the field visits. Officials tended to visit big and medium cultivators and neglected the small ones. According to the study this seems to be a matter of deliberate policy in Karnal where the smaller

people are to be reached by demonstration rather than by the direct contact. The study has some interesting finding on the attitude of the officials to the cultivators who had on their own initiative approached the officials. In Karnal 49% of the cultivators found the attitude to be helpful whereas only 23% in Gorakhpur felt similarly. On the other hand 50% of the cultivators in Gorakhpur felt that officials were indifferent whereas 23% of cultivators in Karnal had this complaint. Incidentally, the complaints of indifference were much greater amongst small cultivators than among medium and big ones.

12.20 The findings of the research study described above bring about very clearly the importance of effective administration in the implementation of developmental programmes. The sharp differences in the administrative strategy and the quality of administration between Karnal and Gorakhpur may well be responsible for the substantial difference in agricultural performance between the two areas. It could be difficult to say whether the performance of Gorakhpur would have improved very substantially if the Karnal pattern of single line command separation of extension and supply, effective inter-departmental coordination well-qualified and motivated personnel was prevalent there. There are certainly other factors to work besides administration. Nevertheless, it appears that the different administrative set up could have led to better results in Gorakhpur. The Committee would emphasise that effective administration is the key to rapid development in backward areas. The crucial elements that determine the success of administration are effective co-ordination, the quality of personnel and clarity in the relative role of administration and institutions.

Suggested Approach

12.21 The National Committee in its report on the organisation of administrative and financial structure for backward area development has suggested a certain approach to planning and implementation. It has indicated that the essential requirement of planning and administration at the area must be as follows:—

- (a) It must offer coordination of the political, administrative and local institutions for determining the programme of development for the area and the manner in which it can be implemented, thus enabling direct inter-action between citizens, panchayti raj bodies, non-official agencies like cooperatives and implementing agencies.

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- (b) It must bring together all the administrative operations at the area level under effective coordination and a minimum effective control of a single agency to be able to effectively counteract the powerful forces of centralisation and fragmented decision making, associated with vertical administrative hierarchies dealing with separate segments of the economy.
- (c) It must provide an effective mechanism for formulating a programme of development based upon the local resources, needs and expectations of the people.
- (d) It must interact with the existing institutions and local bodies and bring an administrative cohesion in these bodies by persuasion and get an agreed participation in the development programmes with specific responsibility for their part in the programme.
- (e) It must clearly lay down a programme of work for the participating agencies which would be made responsible for the proper execution of their respective assignments.

12.22 In pursuance of this approach the Committee has suggested a project approach on the pattern of the integrated tribal development project for the total development of the project area. Each project is expected to cover 2-3 blocks. After considering several alternatives the Committee has suggested that the project authority should be set up by an executive order of the State Government which should clearly lay down the delegation of powers. The Project authority should cover the entire non-regulatory administrative apparatus in the project area. The authority would be responsible for the planning, direction and monitoring of all developmental programmes in the project area. While actual implementation of programmes would continue to remain as hitherto with the concerned department, the authority would, however, exercise such powers as are considered necessary to ensure not only the coordination of the work of all the departmental officers in the project but also be in a position to exercise such control as would enable it to issue directives and take work from them. The block development officer or his equivalent would function as the executive officer under the project authority as far as block is concerned. In order to provide a link-up at the district level, the Committee has suggested that the Collector should be the Chairman for all the projects located in the district. It has also suggested an Advisory Committee at district level for

planning, monitoring, implementation and co-ordination. The National Committee in its report has also suggested some arrangement for monitoring at State and Central level.

12.23 The recommendations of the Committee will not necessarily involve additional staff. Much of it can be secured by a suitable reorganisation of the staff already in position in backward areas. However, some strengthening for purposes of planning and monitoring will be required and the Committee has made some recommendations in this regard. The main requirement here is for the district planning cell which will have to play a nodal role in the process of local planning. The Committee has also recommended some strengthening of machinery for backward area planning at Central and State level.

12.24 An important question has to be settled as to the role of Panchayati Raj in the structure the Committee is suggesting. At the block level the Panchayat Samiti is the elected body with certain powers of policy formulation. The actual field picture regarding the powers and authority of the Panchayat Samiti varies very substantially from State to State. The only fixed authority at this level is the Block Development Officer with his staff and an agreement for coordination of the other hierarchies at that point for certain accepted policies. The project approach dealing with more than one backward block has got the capacity to coordinate satisfactorily the work of the Panchayat Samithi in the fields which they handle and the work of the other departments and institutions within the project area. There is no conflict between Panchayati Raj and the project authority at this level. The Chairman of the Panchayat Samithi is proposed to be included as a member of the Board of Management at the project level to bring the necessary coordination.

12.25 Whatever is the administrative and organisational structure, a dedicated group of people can always deliver the goods. It will be idealistic, however, to conceive of a system manned by members all of whom are really first rate. It is for this reason that considerable stress has to be laid on administrative and organisational structure so that given an average quality of personnel, the system can work.

12.26 Within the parameters of the prevailing situation in personnel administration, the backward areas in particular tribals, inaccessible hills and desert areas, suffer from some special disability because of their special problems some of these are :—

- (a) These areas lack special services like education/health. This entails extra financial burden on all categories of

- (b) It must bring together all the administrative operations at the area level under effective coordination and a minimum effective control of a single agency to be able to effectively counteract the powerful forces of centralisation and fragmented decision making, associated with vertical administrative hierarchies dealing with separate segments of the economy.
- (c) It must provide an effective mechanism for formulating a programme of development based upon the local resources, needs and expectations of the people.
- (d) It must interact with the existing institutions and local bodies and bring an administrative cohesion in these bodies by persuasion and get an agreed participation in the development programmes with specific responsibility for their part in the programme.
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- (a) These areas lack special services like education/health. This entails extra financial burden on all categories of

personnel particularly those working outside the main towns and in more interior areas. The children's education become a real burden and many are forced to maintain a double establishment.

- (b) Many of these areas are still unhealthy. This adversely affects the personnel.
- (c) The communications generally are not well developed requiring individuals to walk long distances before they can reach even the rail heads. It also results in a higher cost of living because the commodities to which the Group is used to, may not be available in these far off lands. Lack of communication also means more stringent working conditions for which people may not be prepared without adequate compensation.
- (d) Housing facilities are conspicuous by their absence in the interior areas and accommodation of any description is not available even on rent. The alternative is to descend to the level of general living conditions which may require considerable psychological adjustments.
- (e) Most areas lack minimum amenities which are available in larger towns and more forward areas.

12.27 Notwithstanding the special problems of backward areas, there is no adequate compensation system in the salary structure in most of the States except in those cases where special allowances have been provided traditionally as in Arunachal Pradesh, Andaman, Leh etc. The problem is particularly acute in the States which have sizeable hill and tribal areas and which are themselves economically backward. Because of this and other reasons one of the main problems in developing the backward areas would appear to be the unwillingness of the administrative system or the technical experts to move to these areas, study the problem at first hand and find the remedy. The Committee has found during its visits to the Blocks that large number of development posts in the backward areas are lying vacant.

12.28 The Committee has made certain specific recommendations to meet the problem of personnel in backward areas. The recommendations of the Committee involve a resort to a measure of compulsion as well as grant of incentives and provision of facilities. The Committee in its report has noted with regret that a culture seems

to be developing in with those who have got into the administrative and technical field that they are entitled to the best that the country can give and that they should not be asked to move to backward areas. There are, of course, problems of incentives and facilities but the important point is that the country has a right to expect exertion from the development staff and technologists. A sociological pressure has to arise so that needs of backward areas can be met. It is equally important that the Governments in States strictly ensure that posting of officers and staff to the backward areas based on logical approach are not cancelled, whatever be the pressure, political or otherwise. The Committee has noted with regret that politics has started playing a very crucial role in the matter of transfer and postings.

There is need to restore discipline in the administrative machinery so that the transfers are not circumvented by officials through the help of politicians. Existing government instructions in this regard must be implemented.

12.29 The Committee has also stressed the importance of adequate training and refresher courses for the staff to be posted in backward areas. This is particularly important for officers working in tribal areas who are often not even conversant with the local language.

12.30 The reorganisation of the administration on the project approach has to be accompanied by certain measures of financial decentralisation and discipline. The National Committee has accordingly recommended that the following features should form a part of financing arrangements for the development of backward areas :—

- (i) *Sub-Plan Approach* : The concept of a sub-plan has been developed in the Integrated Tribal Development Programme. In the plan of every development department there are programmes which are divisible amongst areas. The Committee has recommended that there should be 'Sub-Plan' for the development of backward areas both at the State and Central levels. In the Sub-Plan approach, a weighted allocation should be given to the backward area from the divisible part of the plan of the development departments. The principles of this distribution between non-backward and backward areas have been set out in detail in the Report on Organisation of Administrative and Financial Structures.

personnel particularly those working outside the main towns and in more interior areas. The children's education become a real burden and many are forced to maintain a double establishment.

- (b) Many of these areas are still unhealthy. This adversely affects the personnel.
- (c) The communications generally are not well developed requiring individuals to walk long distances before they can reach even the rail heads. It also results in a higher cost of living because the commodities to which the Group is used to, may not be available in these far off lands. Lack of communication also means more stringent working conditions for which people may not be prepared without adequate compensation.
- (d) Housing facilities are conspicuous by their absence in the interior areas and accommodation of any description is not available even on rent. The alternative is to descend to the level of general living conditions which may require considerable psychological adjustments.
- (e) Most areas lack minimum amenities which are available in larger towns and more forward areas.

12.27 Notwithstanding the special problems of backward areas, there is no adequate compensation system in the salary structure in most of the States except in those cases where special allowances have been provided traditionally as in Arunachal Pradesh, Andaman, Leh etc. The problem is particularly acute in the States which have sizeable hill and tribal areas and which are themselves economically backward. Because of this and other reasons one of the main problems in developing the backward areas would appear to be the unwillingness of the administrative system or the technical experts to move to these areas, study the problem at first hand and find the remedy. The Committee has found during its visits to the Blocks that large number of development posts in the backward areas are lying vacant.

12.28 The Committee has made certain specific recommendations to meet the problem of personnel in backward areas. The recommendations of the Committee involve a resort to a measure of compulsion as well as grant of incentives and provision of facilities. The Committee in its report has noted with regret that a culture seems

to be developing in with those who have got into the administrative and technical field that they are entitled to the best that the country can give and that they should not be asked to move to backward areas. There are, of course, problems of incentives and facilities but the important point is that the country has a right to expect exertion from the development staff and technologists. A sociological pressure has to arise so that needs of backward areas can be met. It is equally important that the Governments in States strictly ensure that posting of officers and staff to the backward areas based on logical approach are not cancelled, whatever be the pressure, political or otherwise. The Committee has noted with regret that politics has started playing a very crucial role in the matter of transfer and postings.

There is need to restore discipline in the administrative machinery so that the transfers are not circumvented by officials through the help of politicians. Existing government instructions in this regard must be implemented.

12.29 The Committee has also stressed the importance of adequate training and refresher courses for the staff to be posted in backward areas. This is particularly important for officers working in tribal areas who are often not even conversant with the local language.

12.30 The reorganisation of the administration on the project approach has to be accompanied by certain measures of financial decentralisation and discipline. The National Committee has accordingly recommended that the following features should form a part of financing arrangements for the development of backward areas :—

- (i) *Sub-Plan Approach* : The concept of a sub-plan has been developed in the Integrated Tribal Development Programme. In the plan of every development department there are programmes which are divisible amongst areas. The Committee has recommended that there should be 'Sub-Plan' for the development of backward areas both at the State and Central levels. In the Sub-Plan approach, a weighted allocation should be given to the backward area from the divisible part of the plan of the development departments. The principles of this distribution between non-backward and backward areas have been set out in detail in the Report on Organisation of Administrative and Financial Structures.

(ii) *Project Fund for Local Planning and Special Additive Fund*: Even though the divisible part of the State Plan is allocated fairly to backward areas, the requirements of on-going programmes will consume most of the funds so allocated leaving very little scope to the local planning group to adjust the funding to local requirements of an integrated development approach at the local level. Special steps will, therefore, have to be taken gradually to provide larger and larger uncommitted funds to the local planning and implementation group to enable them to bring in local planning of greater and greater magnitude gradually. In the first year of the plan it may not be possible for the States to adjust their budgets to allow for this local diversion. But from the second year onwards, starting with 10% of the divisible amount and gradually increasing by 10% each year and reaching 40% in the fifth year, a proportion of the divisible allocation should be given to the local planning group for their planning and implementation. In addition, as development of backward areas has to be accelerated, the Committee is of the view that a special allocation of Rs. 5 lakhs per year for each block in the project areas for the Plan period should be available as a special additive, in addition to whatever is now being made available as special additive. The Committee also appreciates that the new project approach cannot be imposed all over the country as a one time operation. In order to enable the States to adjust their organisational planning and implementation structure to the new requirements, the project approach will have to be phased over the five years of the Plan period. It has been suggested that 600 blocks may be taken up in the first year and the programme phased to absorb all the backward blocks by the fifth year of the Plan.

(iii) *Financial Discipline*: There being a tendency to divert funds intended for backward and difficult areas to more forward areas and easier programmes, financial discipline will have to be imposed to ensure that the funds included in the Sub-Plan for the development of backward areas and allocated to the projects in the backward areas by various departments and

the additives are spent properly within the year in that project area. The Committee has suggested some norms for protection of allocations to the project areas.

12.31 The Committee's approach has laid great stress on integration and coordination. Rural development can be achieved really well only when the various production opportunities can be brought to the door of the rural household. Each of the sectors, namely, agriculture, rural industry, the tertiary sector is multi-faceted and multi-disciplinary. They require the integration of plans and coordination of the efforts of scientists and technologists, extension workers, institutions, services marketing facilities etc. It also requires training of all those participating in the vast complicated structure so that they can understand their role in the overall framework. Firstly, there has to be coordination in the chain of technology transfer from the laboratory to the field. Secondly, there has to be coordination between the technical programme and the other requirements. Thirdly, and the most important of all, there has to be over all integration and coordination between the several sectors so as to make a comprehensive package to the household according to their capacities to absorb.

12.32 Coordination is a management problem. The essential needs of coordination are:—

- (i) The coordinator must have a bird's eye view of the whole complex and broadly understand the interplay of the several parts in the functioning of the system.
- (ii) When systems are large, each functional component should be given full freedom to work with decentralised authority to the head in charge of the function.
- (iii) The coordinator should not treat himself as an expert in any of the functions and overrule the head incharge of the function, but bring out the problem at the coordination level for a consensus.
- (iv) The coordinator does not impose decisions but arrives at an acceptable consensus in which he will have to take a guiding role on the basis of his understanding of the interplay of the functions in the system.

12.33 Ideally what is required in developmental planning is management by objectives. However, the objectives of the many agencies involved as well as of the individual officers will vary greatly. The road department may see its

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objectives mainly in terms of the kilometrage of roads constructed. This may mean that it is reluctant to go into the difficult areas because it will bring down the total length of roads that it can take up. The bank may be interested in maximising deposits or in minimising the risk of default. This may work against some of the specific beneficiary oriented programmes in the area. In this manner, the objectives of other agencies like the electricity boards, the irrigation department, the soil conservation department etc. may differ. The various suggestions made by the Committee with regard to the project level implementation, sub-plan approach, the coordination arrangement at district, state and central level will help in coordinating diverse objectives towards local development. But the most important thing is that coordination is not merely a matter of systems. A certain mechanism for coordination is available in the processes of the formulation of block and district plans and the related credit

plans. The coordination of implementation at the field level will involve much more than just the formulation of plans. It will require an ability in each officer to see himself as part of a local team. It will also require skilful management of people by the head of the coordination system whether he be a project officer or the chairman of a coordination committee. These things can come about not merely by the institution of systems, but by the gradual evolution of working practices. The objectives of different organisations and individuals have to be harmonised so as to work towards a common end. The achievement of this harmony is the prime task of the local planning and implementation machinery. The Committee would, therefore, emphasise that its recommendations have to be seen not merely as a list of suggestions which have to be accepted or rejected but as an approach which has to be translated into reality by the gradual building up of working practices at the local level.

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