4.4 Programme contents

4.4.1 The main thrust in the programmes should be resource regeneration/conservation for sustainable development. The programmes should have all the ingredients on resource inventory and management. The components should not be pre-determined, as at present. There should be total flexibility in this regard and the actual choice of the components should emerge from the watershed plans prepared by implementing agencies including beneficiaries. Only the financial norms per hectare be fixed such that proportionate funding be allowed depending on the project and the evidence produced by the sponsoring agency. However, there should be a negative list i.e. activities to be discouraged, as approved by the District Level Committee.

4.4.2 The different processes of desertification and the measures to combat them are discussed in the Appendix to this Chapter. We give below some of the specific recommendations emerging from this discussion:

(i) It has been observed that large amounts are being spent on minor irrigation works. However, it should be restricted by stipulating that money not exceeding certain amount to be specified by the State Level Committee should be spent on minor irrigation works and in 500 hectare watershed, about 2 or 3 small structures may be allowed. Bigger structures and Kolhapur Type (K.T.) weir should be avoided under the Programmes.

(ii) With the minor irrigation works, the groundwater exploitation is expected to increase. However, its use should not be euphoric, but allow only to tap the rechargeable water without exploiting the static water. People's participation will be helpful in this regard. Rice, sugarcane and other heavy duty crops should be strictly prohibited in these watershed areas.

(iii) The groundwater, in case of extreme drought should be only used for the existing orchards, if any, and be fully diverted as drinking water.

(iv) Renovation and maintenance of existing water harvesting structures in the selected watersheds may be allowed with only manual labour. No heavy machinery that displaces labour should be used for desilting etc.. However, it should be the policy of the State Governments to persuade the community to maintain the structures created under the programmes by handing over such assets to them.

(v) The maintenance of plantations may be permitted for 5 years in arid ecosystems whereas, in DPAP areas, the cost for maintaining plan-
(vi) The pricing of electricity should be rationalised with a view to discouraging overdrawl of groundwater. In this context, charges for electricity on the basis of consumption by the users as a whole could be experimented so that cost from individuals are duly recovered by the community.

(vii) In tribal areas where rainfall is comparatively higher, emphasis should be given on efficient water harvesting through minor irrigation works.

(viii) One of the means to ensure people's participation in the programmes is to secure some contributions from the beneficiaries in the form of labour or material. The implementing agencies should make conscious efforts to mobilise local people to make some contributions in the programme works.

(ix) Since replicability is the main criterion in the area development on watershed basis for sustainability, the approach should be simple, easily implementable and cost-effective.

(x) On the issue of subsidy, the Committee recommends that, since the activities will be taken up on a watershed basis and on all categories of land falling within the watershed area, there should be a uniform pattern of providing subsidy. In order to cover all the areas in the watershed, the subsidy on programme works should be given to all the beneficiaries irrespective of the size of the holding of the land owners. In general, subsidies should be limited to only those activities which have a long gestation period.
4.5 Integration with related programmes

4.5.1 The improvements in planning and implementation, promotion of people’s participation and the programme-content recommended in the foregoing sections would call for integration of related schemes primarily within the Ministry of Rural Development and effective coordination with other Ministries implementing either identical/similar programmes or other programmes having direct bearing on water and land resource based activities.

4.5.2 At present, in the Ministry of Rural Development, the principles of allocation of funds and the procedures for approval, implementation and monitoring of projects under the DPAP, the DDP, and the IWDP are widely varying. As the logical corollary of our recommendation that the future strategies should be based on the integrated watershed development approach with effective people’s participation and comprehensive programme content, it is necessary that the guidelines for the formulation of projects and the procedures for sanctioning, implementation and monitoring should be identical and in consonance with the basic approach advocated by us. Based on the integration of related schemes and harmonization of principles of allocation and procedures for sanctioning and implementation that we recommend, it should be possible to enhance the coverage of watersheds in the wasteland-dominant and the drought prone area districts.

4.5.3 The Ministry of Rural Development has substantially stepped up the outlay of rural employment generation especially through the JRY (2nd Stream) and the Employment Assurance Scheme (EAS). Nearly a sum of Rs.700 crores is being channelised under the JRY (2nd Stream) to 120 backward districts mostly falling within the wasteland dominant and DPAP areas. These funds are being spent on works/programmes planned and executed at the district level. The guidelines of the Ministry of Rural Development for these works accord high priority to the implementation of watershed treatment plans. Further, the 1994-95 Budget Estimates of the Ministry envisage an outlay of Rs.1200 crores under the EAS. All the DPAP and DDP areas are covered under the EAS. The guidelines of the EAS envisage that at least 60% of the expenditure should be incurred on works aimed at water and soil conservation and minor irrigation development. Therefore, if watershed based development projects are taken on priority basis for implementation under the JRY Second Stream and the EAS, substantial expansion of coverage of watersheds for treatment and development can easily be achieved.

4.5.4 Most of the programmes of the Ministry of Rural Development aim at development of backward areas such as the DPAP and for employment generation are funded through matching contribution by States. However, we notice that the wasteland development scheme of the Ministry does not
envision any matching contribution from States. Keeping in view the critical importance of regeneration of wastelands and prevention of further degradation of lands and the large magnitude of the problem, it is advisable that the States should also contribute a suitable matching share in wastelands development schemes as in the case of DPAP.

4.5.5 Thus by effectively integrating the guidelines and procedures for planning, sanctioning and implementation of related schemes under its administrative jurisdiction, the Ministry of Rural Development would be able to channelise substantial funds towards integrated development of watersheds as follows:

i) From the DPAP including States' share Rs.200 crores

ii) From the DDP Rs.100 crores

iii) From the IWDP (assuming 50% States' matching contribution) Rs.100 crores

iv) From the EAS at least 40% funds as envisaged in the guidelines Rs.500 crores

v) From JRY Second Stream in 120 backward districts 50% Rs.350 crores

Thus, from the Centrally Sponsored Scheme of the Ministry of Rural Development alone, nearly a sum of Rs.1250 crores can be channelised for watershed-based development on the lines recommended earlier.

4.5.6 The Committee assumes that from the share of several States for their sectoral outlays regarding their own development plans for soil conservation, horticulture, groundwater development, minor irrigation etc. it should be possible to provide, plan and implement watershed development based programmes of at least a sum of Rs.300 crores.

4.5.7 The main factors found responsible for the unsatisfactory performance of the DPAP as mentioned elsewhere were the undertaking of activities unrelated to the core objectives and the use of DPAP & DDP allocations as substitutes for sectoral funds. Thus, despite the fact that nearly a sum of Rs.2000 crores has been spent on these programmes since their inception, coverage of area under comprehensive water and soil development plans have been only about 10% of the total geographical area of the blocks covered by DPAP. Adoption of the unified approach and integration of related programmes in rural development should, in our estimates, make available, at current level of funding, at least a sum of Rs.1500 crores every year for this important national work.
4.5.8 The integration of flow of funds available from different schemes and programmes of the Ministry of Rural Development should not, in our view, be left to the primary implementation level, namely, Watershed Committees or village level functionaries. The integration of schemes/programmes at the stage of planning and implementation, provision of funds, etc. should be done at the appropriate sanctioning levels, namely the DRDA or at the State Government. The funding of watershed-based area development schemes should be done comprehensively, based on the projects prepared and the treatment plans developed on scientific lines. The guidelines and procedures for sanction of projects, release of funds, implementation, monitoring etc. should all be uniform in order to facilitate funding and implementation based on project approach.

4.5.9 Ministry of Environment & Forests, Water Resources and Non-Conventional Energy Sources implement their schemes in DPAP and DDP blocks/districts which are either identical to the schemes, under these programmes or have direct bearing on them. Resources of these Ministries and Departments may be utilised as under:

(1) Ministry of Water Resources for minor irrigation and control over exploitation of groundwater.

(2) Ministry of Environment & Forests for afforestation on forest land.

(3) Department of Non-Conventional Energy Sources for utilisation of Wind Energy Pumps and Solar P.V. pumps for lift irrigation and to assess the requirement of energy plantation on the basis of facility of bio-gas plants, smokeless chulhas and Solar Cookers presently available in the area and planned to be increased in future.

4.5.10 To follow up the Committee’s recommendations, the Ministry of Rural Development should take necessary steps for effective coordination between the different wings of the Ministry as well as between the concerned Ministries. The Ministry should also formulate guidelines for bringing about uniformity of approach between the programmes under different agencies and should commission training modules for the preparation of the watershed development plans.
4.6. Research & Training

4.6.1 Research

The Committee has visited ICRISAT, CRIDA, CAZRI, Arid Zone Forest Research Institute (AFRI), Jodhpur, and had interaction with Senior Scientists including the Directors of CAZRI and CRIDA. It is now quite evident that adequate research back-stop is available for area development on watershed basis in arid, semi-arid and dry sub-humid regions. ICAR system has also been testing their findings through 46 selected watersheds in different Agro-climatic Zones. A summary of the technical know-how available in this area which should be used extensively is given in the Appendix to this chapter.

4.6.2 Based on these R&D efforts, the Committee feels that a renewed thrust can be given in area development on watershed basis by:

(a) Creating awareness through training.

(b) Inducing the adoption of available technologies.

4.6.3 Research on development and further fine-tuning of technologies is a continuing process. We suggest that Ministry of Rural Development should support the Research Institutions for providing R&D back-up to these programmes.

4.6.4 Training

Awareness building is important because it leads to enhancement of productivity. During field visits, it became clear that many States are not even aware of the concept of watershed in the programme implementation of DPAP/DDP. This calls for training at various levels. It is also well recognised that in area development works, people's participation is a must. Since in terms of the recommendations of this Committee, projects are to be sanctioned on the basis of the detailed plans prepared on watershed basis, the Committee would like to emphasise that training at various levels for the preparation of watershed development plans is going to be critical for the successful implementation of the programmes. The Ministry of Rural Development has to play a pivotal role in organising such training by way of selecting appropriate institutions, funding them, developing course modules for the purpose and monitoring them.

4.6.5 We recommend that awareness should be created about the need for people's participation in such endeavour and about the concept of area development on watershed basis so that action plans for development of these areas can be prepared.

4.6.6 MANAGE, NIRD and some of the Voluntary Agencies are creating awareness on the need for people's participation. ICAR Institutions like
CAZRI, CRIDA, CSWCR&TI and some of the State Agricultural Universities are already imparting training in area development on watershed basis. The Committee recommends that these Institutions may be requested to impart the training on:

(a) the methods for ensuring people’s participation.

(b) developing areas on watershed basis.

4.6.7 It is also suggested that training programme may be devised as follows at three levels:

i) District Administrators and Presidents/Chairmen of Zilla Parishads.

ii) Subject Matter Specialists of Line Departments.

iii) Functionaries from Voluntary Agencies and Beneficiaries.

4.6.8 Accordingly, the State Training Institutions along with NGOs may also be involved for imparting training to beneficiaries.

4.6.9 The Committee strongly recommends that funding for training should be met by Ministry of Rural Development and it should organise programme of training as suggested above, and monitor to ensure preparation of action plans for watershed development. States that need priority attention are Bihar, Uttar Pradesh, Madhya Pradesh and Orissa.