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## Common Guidelines for Watershed Development Projects, 2008

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# **COMMON GUIDELINES FOR WATERSHED DEVELOPMENT PROJECTS-2008**

**Revised Edition - 2011**



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# 1. Preface

1. In 1994, a Technical Committee under the Chairmanship of Prof. C.H. Hanumantha Rao, was appointed to assess the Drought Prone Areas Programme (DPAP) and the Desert Development Programme (DDP) with the purpose of identifying weaknesses and suggesting improvements. The Committee, after careful appraisal, opined that the “programmes have been implemented in a fragmented manner by different departments through rigid guidelines without any well-designed plans prepared on watershed basis by involving the inhabitants. Except in a few places, the achievements have been sub-optimal. Ecological degradation has been proceeding unabated in these areas with reduced forest cover, reducing water table and a shortage of drinking water, fuel and fodder” (Hanumantha Rao Committee, 1994, Preface).
2. Against this backdrop, the Committee made a number of recommendations and formulated a set of guidelines that brought the DDP, the DPAP and the Integrated Wastelands Development Programme (IWDP) under a single umbrella. The watershed projects taken up by the Ministry of Rural Development (MoRD) from 1994 to 2001 followed these guidelines. In 2000, the Ministry of Agriculture revised its guidelines for its programme, the National Watershed Development Project for Rainfed Areas (NWDPA). These guidelines were intended to be common guidelines to make the programme more participatory, sustainable and equitable. However, the MoRD revised the 1994 Hanumantha Rao Committee guidelines in 2001 and yet again in 2003 under the nomenclature “Hariyali Guidelines”.

3. In the meanwhile, emerging issues of ground water recharging and convergence to create a critical mass of investments demanded innovative guidelines. At the advent of the Eleventh Plan period, our main challenge was to move the nation decisively in the direction of “inclusive growth”. Rainfed areas of 85 million hectares out of the 142 million hectares of net cultivated area, have suffered neglect in the past. High untapped productivity and income potential exists in these areas.
4. An insight into the rainfed regions reveals a grim picture of poverty, water scarcity, rapid depletion of ground water table and fragile ecosystems. Land degradation due to soil erosion by wind and water, low rainwater use efficiency, high population pressure, acute fodder shortage, poor livestock productivity, underinvestment in water use efficiency, lack of assured and remunerative marketing opportunities and poor infrastructure are important concerns of enabling policies. The challenge in rainfed areas, therefore, is to improve rural livelihoods through participatory watershed development with focus on integrated farming systems for enhancing income, productivity and livelihood security in a sustainable manner.
5. The National Rainfed Area Authority (NRAA) has been set up in November 2006, keeping in mind the need to give a special thrust to these regions. A close analysis of various types of rainfed situations would reveal that soil and water conservation, watershed development and efficient water management are the key to sustainable development of rainfed areas. The watershed approach has been accepted as a major theme for development of rainfed areas with a view

to conserving natural resources of water, soil and vegetation by mobilizing social capital. Various studies have pointed out the central preoccupation of watershed development projects with soil and water conservation and relative neglect of issues relating to balanced use of natural resources and livelihoods.

- 6.** In order to assess the performance of various ongoing projects / programmes of watershed development, a series of evaluation studies have been conducted by Indian Council of Agricultural Research (ICAR) Institutes, State Agriculture Universities (SAUs), National Remote Sensing Centre (NRSC) etc. Besides, impact assessment studies were carried out by the Ministry of Agriculture, Ministry of Rural Development, Planning Commission, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and the Technical Committee constituted by the Department of Land Resources (DoLR). These studies support the observation that in several watersheds, the implementation of the programme has been effective for natural resource conservation by increasing the productivity of the land, bringing additional area under agriculture, employment generation and social upliftment of beneficiaries living in the rural areas. But these successes have been sporadic and intermittent. The overall impact at the state and national levels has generally been inadequate. Additional demand and supply driven socio-economic and risk managing paradigms are emerging.
- 7.** It is in this context that in coordination with the Planning Commission, an initiative has been taken to formulate "Common Guidelines for Watershed Development Projects" in order to have a unified perspective by all Ministries. These guidelines are therefore applicable to all watershed development projects



in all Departments / Ministries of Government of India concerned with Watershed Development Projects.

8. Out of the total geographical area of the country of 329 million hectare (Mha), about 146 Mha is degraded and 85 Mha is rainfed arable land. This includes degraded land not only under private ownership, but also the one with the departments of panchayat, revenue and forest. All these lands are prioritized for development under various watershed development projects under these guidelines. During the 11th Five Year Plan, major thrust has been laid on developing the untreated areas.
9. These Guidelines broadly indicate a fresh framework for the next generation watershed programmes. The key features of this new unified approach can be broadly outlined as follows:
  - I. **Delegating Powers to States:** States will now be empowered to sanction and oversee the implementation of watershed projects within their areas of jurisdiction and within the parameters set out in these guidelines.
  - II. **Dedicated Institutions:** There would be dedicated implementing agencies with multi-disciplinary professional teams at the national, state and district level for managing the watershed programmes.
  - III. **Financial Assistance to Dedicated Institutions:** Additional financial assistance would be provided for strengthening of institutions at the district, state and national level to ensure professionalism in management of watershed projects.

- IV. Duration of the Programme:** With the expanded scope and expectations under this approach, the project duration has been enhanced in the range of 4 years to 7 years depending upon nature of activities spread over 3 distinct phases viz., preparatory phase, works phase and consolidation phase.
- V. Livelihood Orientation:** Productivity enhancement and livelihoods shall be given priority along with conservation measures. Resource development and usage will be planned to promote farming and allied activities to promote local livelihoods while ensuring resource conservation and regeneration. The new approach would systematically integrate livestock and fisheries management as a central intervention and encourage dairying and marketing of dairy products. In the rainfed areas, the animal resources become a major source of income for the people. When effectively integrated with the Watershed Development Projects, a comprehensive animal husbandry component would contribute significantly to ensuring a better and sustainable livelihood for the people of the rainfed areas.
- VI. Cluster Approach:** The new approach envisages a broader vision of geo-hydrological units normally of average size of 1,000 to 5,000 hectares comprising of clusters of micro-watersheds. If resources and area exist, additional watersheds in contiguous areas in clusters may be taken up. However, smaller size projects will be sanctioned in the hilly/difficult terrain areas.

- VII. Scientific Planning:** Special efforts need to be made to utilize the information technology and remote sensing inputs in planning, monitoring and evaluation of the programme.
- VIII. Capacity Building:** Capacity Building and training of all functionaries and stakeholders involved in the watershed programme implementation would be carried out on war footing with definite action plan and requisite professionalism and competence.
- IX. Multi Tier Approach:** There would be a multi tier ridge to valley sequenced approach, which should be adopted towards the implementation of the Watershed Development Projects. The higher reaches or the forests are actually where the water sources originate. The approach, therefore, will be to identify an area and first look at the forest and the hilly regions, in the upper water catchments wherever possible. When suitable treatment is undertaken in forest areas in upper catchments with the funding support from watershed development projects then the hardest part of the watershed is tackled. Forest department is managing structures such as check dams, contour-bunds etc. to arrest the erosion and degradation of the forests, which in turn, actually benefit the lower tiers. Thus, in the upper reaches, which are mostly hilly and forested, the onus of implementation would mainly lie with the Forest Departments and the Joint Forest Management Committees (JFMCs). Irrespective of the type of forests, the land forming integral part of the selected watershed project area having agriculture/wasteland and forest land use, the fringe-forest

areas and the degraded areas needing treatment which have implications for the lower reaches of watershed in terms of runoff/ water yield, soil erosion & sedimentation, fodder, etc should be part of the holistic watershed treatment plan, with major focus on soil & moisture conservation. Works undertaken in such forest areas can be funded through Integrated Watershed Management Programme (IWMP) scheme to derive full advantage of the investments made. All efforts should be made to converge Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Afforestation Schemes, etc. with IWMP for treatment of forest areas.

- X.** The second tier is the intermediate tier or the slopes, which are just above the agricultural lands. In the intermediate slopes, the watershed management approach would address all the necessary issues by looking at all the best possible options including treatment, cropping pattern, horticulture, agro-forestry, etc.

As to the third level of the plains and the flat areas, where typically, the farmers are operating, there would be a large concentration of labour intensive works. The watershed development process would be synergized with the employment generating programmes such as the MGNREGA, Backward Regions Grant Fund (BRGF), etc thus providing strong coordination.

- 10.** These guidelines coupled with the flexibilities inherent in them would provide an enabling framework for the planning, design, management and implementation

of all watershed development projects in the country. They will apply to all schemes concerned with watershed development of all departments of Government of India.

New watershed projects will be implemented in accordance with these Common Guidelines with effect from 1st April 2008. Already sanctioned and ongoing projects will follow previous guidelines. For interpretation of any of the provisions of these guidelines, the NRAA will be the final authority. If any modification in any of the provisions of these Guidelines is contemplated by any of the Nodal Ministry, then such modification would need to be ratified by the Executive Committee of the NRAA.

**In view of clarifications /suggestions received from the concerned Departments/ Ministries, State Governments, NGOs, etc from time to time, certain modifications have been made by the Executive Committee of NRAA. These modifications/ amendments have been circulated to all the Departments/ Ministries, SLNAs, etc as and when amended. The Revised Edition of the Common Guidelines for Watershed Development Projects – 2008 has been brought out incorporating comprehensive amendments made so far.**

## **2. Guiding Principles**

- 11.** The common guidelines for watershed development projects are based on the following principles:

- I. Equity and Gender Sensitivity:** Watershed Development Projects should

be considered as levers of inclusiveness. Project Implementing Agencies (PIAs), must facilitate the equity processes such as a) enhanced livelihood opportunities for the poor through investment in their assets and improvements in productivity and income, b) improving access of the poor, especially women to the benefits, c) enhancing role of women in decision-making processes and their representation in the institutional arrangements and d) ensuring access to usufruct rights from the common property resources for the resource poor.

**II. Decentralization:** Project management would improve with decentralization, delegation and professionalism. Establishing suitable institutional arrangements within the overall framework of the Panchayati Raj Institutions (PRIs), and the operational flexibility in norms to suit varying local conditions will enhance decentralization. Empowered committees with delegation to rationalise the policies, continuity in administrative support and timely release of funds are the other instruments for effective decentralization.

**III. Facilitating Agencies:** Social mobilisation, community organisation, building capacities of communities in planning and implementation, ensuring equity arrangements, etc need intensive facilitation. Competent organisations including voluntary organizations with professional teams having necessary skills and expertise would be selected through a rigorous process and may be provided financial support to perform the above specific functions.

**IV. Centrality of Community Participation:** Involvement of primary

stakeholders is at the centre of planning, budgeting, implementation, and management of watershed projects. Community organizations may be closely associated with and accountable to Gram Sabhas in project activities.

- V. Capacity Building and Technology Inputs:** Considerable stress would be given on capacity building as a crucial component for achieving the desired results. This would be a continuous process enabling functionaries to enhance their knowledge and skills and develop the correct orientation and perspectives thereby becoming more effective in performing their roles and responsibilities. With current trends and advances in information technology and remote sensing, it is possible to acquire detailed information about the various field level characteristics of any area or region. Thus, the endeavour would be to build in strong technology inputs into the new vision of watershed programmes.
- VI. Monitoring, Evaluation and Learning:** A participatory, outcome and impact-oriented and user-focused monitoring, evaluation and learning system would be put in place to obtain feedback and undertake improvements in planning, project design and implementation.
- VII. Organizational Restructuring:** Establishing appropriate technical and professional support structures at national, state, district and project levels and developing effective functional partnerships among project authorities, implementing agencies and support organizations would play a vital role.

### **3. Technology Inputs**

- 12.** Technology enables us, inter-alia, to strengthen programme management and coordination, undertake activity based project planning, formulate action plans, streamline sanctions and release of funds, create useful data bases, assess actual impacts of projects, make effective prioritizations, prepare sophisticated Detailed Project Reports (DPRs), document best practices and case studies and facilitate the free and seamless flow of information and data.
- 13.** Thus, the endeavour would be to build in strong technology inputs into the new vision of watershed programmes. At the State and National levels, core GIS facilities, with spatial & non-spatial data, would be established and augmented with satellite imagery data received from National Remote Sensing Centre (NRSC), Indian Space Research Organization (ISRO) and Survey of India (SoI). All the GIS layers for various themes would be overlaid having a geo-referenced base layer up to the level of village boundaries in the first instance. This core GIS data may be given controlled access/distribution over network for local project planning. Application software for web-enabled integrated watershed development, spatial & non-spatial data standards and meta-data would also be worked out. Once such a knowledge base is in place, it would be possible to define watershed project boundaries with assignment of unique-identification (unique-id) to each project. It would also be possible to map treatment area with respect to their respective administrative formations in terms of villages, blocks and districts.
- 14.** Remote sensing data would be utilized for finalizing contour maps for assessment



of runoff and for identifying structures best suited for location of projects. This would result in cost and time optimization in project implementation. Technology would also contribute immensely in assessing the actual impact of various programs in a given area. Due to availability of latest remote sensing techniques, it is now possible to assess periodic changes in geo-hydrological potential, soil and crop cover, runoff etc in the project area.

- 15.** Information connectivity would be extended to all the districts and Project Implementation Agencies. This watershed information network would reach right up to the project areas. Each District and State Centre would be equipped with IT and domain professionals with desired skills. Thus technology inputs would bring about a paradigm shift in the implementation and management of the area development programmes.
- 16.** A National Portal will be created which will host the data generated for all watershed projects in the entire country. Inputs will be compiled from all concerned Ministries / Departments including Ministry of Rural Development / Ministry of Environment and Forests / Ministry of Agriculture. The National Portal will be commissioned and maintained by the DoLR.

#### **4. Institutional Arrangements at National, State and District Levels**

Following the spirit of the Guiding Principles, appropriate institutional arrangements would be made at various levels for effective and professional management of watershed development projects.

## **4.1. Role of National Rainfed Area Authority**

**17.** National Rainfed Area Authority (NRAA) would, inter-alia, be responsible for:

- a.** Supporting the process of preparing strategic plans for watershed based development projects at the state and district level keeping in view specific agro-climatic and socio-economic conditions.
- b.** Assisting in the preparation of state specific technical manuals for the multi-disciplinary and integrated approach required for implementation of these projects together with the standards and specifications etc.
- c.** Supporting State Level Nodal Agencies (SLNAs), in identifying resource organizations and establishing capacity building arrangements.
- d.** Facilitating action research relevant to watershed development programme in different agro-climatic regions.
- e.** Conducting studies, evaluation and impact assessment from time to time so that the benefits of these are available for improving the quality of watershed management projects.
- f.** Facilitating convergence of different schemes and projects of Government of India which are having similar objectives.
- g.** Accessing additional funds from other sources including private sector, foreign funding agency, etc and facilitate its use to fill up critical gaps in the programme as well as upscale successful experiences through innovative organizations at field levels.

- h.** Acting as an effective coordinating mechanism between all bodies/ organizations/ agencies/ departments/ ministries etc who are involved in watershed programmes.
- i.** Organizing regional and international conferences, seminars and workshops, study tours, and information sharing.
- j.** Providing technical knowledge inputs and expertise.
- k.** Such other activities as may be decided by the Governing Body of NRAA / Government from time to time.

## **4.2 Institutional Arrangements at the Ministry Level**

- 18.** Whereas each Ministry is free to set up its own mechanism to oversee watershed development programmes, it shall also have the option to set up a Nodal Agency at the central level in the Department for managing and implementing watershed development projects. These nodal agencies will comprise of professional multi-disciplinary experts experienced in the fields of agriculture, water management, institution and capacity building etc.
- 19.** The Nodal Agency at the central level in the Department / Ministry, among others, will perform the following important functions:
  - a.** Facilitate allocation of the budgetary outlay for the projects among the States keeping in view the criteria as specified in the Guidelines.
  - b.** Interact with State and District Level Agencies, facilitate and ensure smooth flow of funds to the Watershed Cell cum Data Centres (WCDCs),

as per the fund flow norms as well as recommendations from the State Level Nodal Agencies.

- c.** Actively support capacity building programmes at all levels.
- d.** Strongly support, augment and initiate Information, Education and Communication (IEC) activities with modern IT inputs.
- e.** Ensure close monitoring through on-line systems.
- f.** Establish suitable systems for field visits, monitoring, social audits and impact assessment through interaction with state and district level agencies for effective implementation of the projects at ground level.
- g.** Prepare a panel of evaluators or evaluation agencies and undertake evaluation studies, impact assessment studies and such other evaluation tasks as deemed fit from time to time.
- h.** Support as well as facilitate participation in national, regional and international conferences, seminars and workshops, study tours, research / field studies and information sharing.
- i.** Act as an effective coordinating mechanism between all bodies, organizations, agencies, departments, Ministries etc. which are involved in watershed programs.
- j.** Undertake all such activities which are useful for the purposes of ensuring that watershed programmes become major vehicles for the overall and all-round development of rainfed areas in the country.

**20.** The Funding support for the Nodal Agency at the central level will come primarily

from the budget of the respective Department / Ministry after suitable review of the existing staff and infrastructure already available and actual requirement. It may also receive support from other Institutes and Agencies both national and international, corporate entities, and such other organisations which seek to support programmes on watershed mode.

### **4.3 National Level Data Centre and National Portal**

- 21.** The National Data Centre and National Portal under the overall aegis of the DoLR would be a national level facility for extending, storing and generating watershed and land resource information, data and knowledge. The National Data Centre (NDC) would collate summary data for the entire country, archival data, data for programme and fund flow management. This centre is planned to be equipped with various GIS thematic layers for cadastral, watershed, soil, land use, socio-economic parameters, habitation etc. It shall have application support for area development programmes, rural employment, land use planning, master data for integrated layers, and high end GIS data for district level planning and monitoring.

### **4.4 State Level Nodal Agency**

- 22.** A dedicated State Level Nodal Agency (SLNA) (Department / Mission / Society/ Authority) will be constituted by the State Government having an independent bank account. The state should be given the flexibility to utilise or strengthen an existing state level agency/department/organisation. Central assistance for SLNA will be transferred directly to the account of SLNA and not into the State

Government budget.

- 23.** The SLNA will sign an MOU with the Departmental Nodal Agency setting out mutual expectations with regard to performance, timelines and financial parameters including conditions related to release of funds to SLNA. The SLNA will be required to review the programme and provide enabling mechanism to set up State Data Cell and ensure regular reporting to the Central Government/ Nodal Agency at the central level in the Department. There would be multi-disciplinary professional support team at the State level to implement the programme.
- 24.** The Development Commissioner / Additional Chief Secretary / Agricultural Production Commissioner/ Principal Secretary of the concerned department or their equivalent nominated by the State Government will be the Chairperson of the SLNA. The State Level Nodal Agency will have a full-time CEO who may be a serving Government officer on deputation or appointed on a contract of not less than three years with the State Level Nodal Agency. Such a contract will set out the terms and conditions of engagement as well as clearly defined goals against which the performance of the CEO will be closely monitored.
- 25.** The SLNA would consist of one representative from the NRAA, one representative each from the Central Nodal Ministries, one representative from NABARD, one representative each from the State Department of Rural Development, Agriculture, Animal Husbandry, Forest and allied sector, one representative from Ground Water Board and one representative from an eminent voluntary organization and two professional experts from research institutes / academia of the state. There will be also representation from MGNREGA, BRGF and other related implementing

agencies at the state level. The SLNA will sanction watershed projects for the State on the basis of approved state perspective and strategic plan as per procedure in vogue and oversee all watershed projects in the state within the parameters set out in these Guidelines.

- 26.** A Team of 4 to 7 professional experts will assist the State Level Nodal Agency. This team will be selected by the State Level Nodal Agency either on deputation from experts available from the line departments or in case such experts are not available, they may be engaged on contract basis from the open market by a transparent process. Their disciplines will, inter-alia, include agriculture, water management, capacity building, social mobilisation, information technology, administration and finance/ accounts, etc. A requisite number of administrative staff will support this team of experts.
- 27.** The main functions of the SLNA will be to:
  - a.** Prepare a perspective and strategic plan of watershed development for the state on the basis of plans prepared at the block and district level and indicate implementation strategy and expected outputs/outcomes, financial outlays and approach the Nodal Agency at the central level in the Department for appraisal and clearance.
  - b.** Establish and maintain a state level data cell from the funds sanctioned to the States, and connect it online with the National Level Data Centre.
  - c.** Provide technical support to Watershed Cell cum Data Centre (WCDC), throughout the state.

- d.** Approve a list of independent institutions for capacity building of various stakeholders within the state and work out the overall capacity building strategy in consultation with NRAA/Nodal Ministry.
  - e.** Approve Project Implementing Agencies identified/selected by WCDC/ District Level Committee by adopting appropriate objective selection criteria and transparent systems.
  - f.** Establish monitoring, evaluation and learning systems at various levels (internal and external/ independent systems).
  - g.** Ensure regular and quality on-line monitoring of watershed projects in the state in association with Nodal Agency at the central level and securing feedback by developing partnerships with independent and capable agencies.
  - h.** Constitute a panel of Independent Institutional Evaluators for all watershed projects within the state, get this panel duly approved by the concerned Nodal Agencies at the central level and ensure that quality evaluations take place on a regular basis.
  - i.** Prepare State Specific Process Guidelines, Technology Manuals etc in coordination with the Nodal Ministry/ NRAA and operationalise the same.
- 28.** The Funding support for the State Level Nodal Agency and the state level data cell will come primarily from the budget of the Department of Land Resources, Ministry of Rural Development after suitable review of the existing staff and infrastructure already available and actual requirement. It may also receive support from other Institutes and Agencies both national and international,



corporate entities, and such other organisations which seek to support programmes on watershed mode. Each State Level Nodal Agency and state level data cell will be provided with an initial capital grant to meet establishment costs and a recurring grant per annum to meet its annual expenses. The actual amount would depend upon the level of staff and infrastructure already available and the actual requirement. Till such time, SLNA is set up, the existing arrangement regarding sanctioning of project and flow of fund will be continued. However, all out efforts should be made by the States to set up SLNAs within a period of 6 months.

#### **4.5 Watershed Cell cum Data Centre (WCDC)**

- 29.** A separate Cell, called the Watershed Cell cum Data Centre (WCDC) will be established at the district level, which will oversee the implementation of watershed programme in each district and will have separate independent accounts for this purpose. It will be set up in DRDA/Zilla Parishad/District Level Implementing Agency/Department in all programme districts as per the convenience of the State Governments and strengthen the same with professional support in the districts implementing large number of watersheds with area more than 25,000 ha. WCDC will function in close co-ordination with the District Planning Committee. District Collector/ CEO, ZP may be designated as Chairman of WCDC and a District Officer of the Department, in which WCDC has been located, may be called the Project Manager for WCDC. The Project Manager will attend to day to day functioning of WCDC and implementation of watershed programmes in their jurisdiction whereas, District Collector/CEO, ZP will have role in securing

coordination and convergence along with periodical review of the programme. Representatives of MGNREGS, BRGF implementing agency at the district level should be included in the periodical review meeting of the programme for convergence.

**30.** WCDC will be a separate unit with a Project Manager and 3 to 6 full time staff (3 in districts with less than 25,000 ha project area and 6 in districts with more than 25,000ha project area) comprising of subject matter specialists on Agriculture/ Water Management / Social Mobilisation/ others as appropriate/ Management & Accounts, and data entry operator appointed on the basis of their qualification and expertise on contract/deputation/transfer etc. A District Officer of the Department in which WCDC has been located will be the Project Manager. The Project Manager, WCDC in consultation with SLNA will spell out well-defined annual goals, against which his/her performance will be consistently monitored. The arrangements for setting up/ strengthening the WCDCs will be financially supported by the Government of India after review of available staff, infrastructure and the actual requirement.

**31.** The functions of WCDC will be as follows:

- a.** Identify potential Project Implementing Agencies (PIAs) in consultation with Zila Parishad/Zila Panchayat/ District Council as per the empanelment process to be decided by the respective State Governments.
- b.** Take up the over all responsibility of facilitating the preparation of strategic and annual action plans for watershed development projects in respective districts.

- c.** Providing professional technical support to Project Implementing Agencies (PIAs) in planning and execution of watershed development projects.
- d.** Develop action plans for capacity building, with close involvement of resource organizations to execute the capacity building action plans.
- e.** Carry out regular monitoring, evaluation and learning.
- f.** Ensure smooth flow of funds to watershed development projects.
- g.** Ensure timely submission of required documents to SLNA / Nodal Agency of the Department at central level.
- h.** Facilitate co-ordination with relevant programmes of agriculture, horticulture, rural development, animal husbandry, etc with watershed development projects for enhancement of productivity and livelihoods.
- i.** Integrate watershed development projects/ plans into District Plans of the District Planning Committees. All expenditure of watershed projects would be reflected in district plans.
- j.** Establish and maintain the District Level Data Cell and link it to the State Level and National Level Data Centre.

#### **4.6 Role of Panchayati Raj Institutions at District and Intermediate Levels**

- 32.** The full responsibility of overseeing the watershed programme within the district will lie with the WCDC which will work in close collaboration with the District Planning Committee (DPC). The DPC will provide full governance support to the

programme. The DPC will approve the perspective and annual action plans relating to watershed projects in the district. DPC will integrate the watershed development plans with over all district plans and also oversee its implementation. WCDC will help the DPC in providing oversight and ensuring regular monitoring and evaluation of the programme. The District Panchayat / Zilla Parishad will have an important role of governance in matters relating to the co-ordination of various sectoral schemes with watershed development projects, review of progress, settling disputes etc. Where the Panchayat system is not in operation, this role will be played by the WCDC/District Autonomous Councils.

- 33.** Similarly, Intermediate Panchayats have an important role in planning the watershed development projects at the intermediate level. They can also provide valuable support to PIAs and Gram Panchayats/ Watershed Committees in technical guidance with the help of their subject matter specialists.

## **5. Institutional Arrangements at Project Level**

### **5.1 Project Implementing Agency (PIA)**

- 34.** The SLNA would evolve appropriate mechanisms for selecting and approving the PIAs, who would be responsible for implementation of watershed projects in different districts. These PIAs may include relevant line departments, autonomous organizations under State/ Central Governments, Government Institutes/ Research Bodies, Panchayats, Voluntary Organizations (VOs). However, the following criteria may be observed in the selection of these PIAs:

- They should preferably have prior experience in watershed related aspects or management of watershed development projects.
- They should be prepared to constitute dedicated Watershed Development Teams.

**35.** Voluntary Organizations (VOs) will have an important role in the programme and their services will be utilized substantively in the areas of awareness generation, capacity building, IEC and social audit among others. As far as direct implementation of the programme is concerned, Voluntary Organizations (VOs) with established credentials may be chosen as PIAs on the basis of detailed criteria as enumerated below.

**35.1** The Voluntary Organizations (VOs) would need to satisfy the following criteria to be selected as PIA:

- a.** Should be a registered legal entity of at least 5 years standing.
- b.** Should have had at least 3 years of field experience in the area of community based Natural Resource Management and livelihood development.
- c.** Should not have been blacklisted by CAPART or any other Department of Government of India or State Government.
- d.** Should be equipped with a dedicated, multidisciplinary team with gender balance.
- e.** Should furnish three years balance sheet, audited statement of accounts and income returns. All accounts of the organization should be up to date.

- f.** Should furnish the profile of its Board of Directors.
- g.** Should have successfully implemented projects independently.

**35.2** It will be subjected to the following conditions:

- i.** At any point of time, one VO cannot be assigned more than 10,000 ha area in a district.
  - ii.** At any point of time, one VO cannot be assigned more than 30,000 ha area in a State.
  - iii.** In any case, not more than 1/4th of the total Projects at a time in a State to be implemented by VOs.
- 36.** Selected PIAs will sign a contract/MOU with the concerned WDCs/ District Level Committee as referred in para 29 that will spell out well-defined annual outcomes, against which the performance of each PIA will be monitored each year and evaluated on a regular basis by institutional evaluators from a panel approved by the SLNA / Departmental Nodal Agency at the central level.
- 37.** Each PIA must put in position a dedicated watershed development team (WDT) with the approval of WDC. The WDT will be hired on contract / deputation / transfer etc for a term not exceeding the project period. The composition of the WDT will be indicated in the contract/ MOU. No programme funds for DPR and watershed works under any circumstances should be released to either the PIA or Watershed Committee (WC) unless the composition of the WDT has been clearly indicated in the MOU/ contract and the team members are fully in place.

## **5.2 Roles and Responsibilities of the PIA**

- 38.** The Project Implementing Agency (PIA) will provide necessary technical guidance to the Gram Panchayat for preparation of development plans for the watershed through Participatory Rural Appraisal (PRA) exercise, undertake community organization and training for the village communities, supervise watershed development activities, inspect and authenticate project accounts, encourage adoption of low cost technologies and build upon indigenous technical knowledge, monitor and review the overall project implementation and set up institutional arrangements for post-project operation and maintenance and further development of the assets created during the project period.
- 39.** The PIA, after careful scrutiny, shall submit the Action Plan for Watershed Development Project for approval of the WCDC/DRDA and other arrangements. The PIA shall submit the periodical progress report to WCDC. The PIA shall also arrange physical, financial and social audit of the work undertaken. It will facilitate the mobilization of additional financial resources from other government programmes, such as MGNREGA, BRGF, SGRY, National Horticulture Mission, Tribal Welfare Schemes, Artificial Ground Water Recharging, Greening India, etc.

## **5.3 Watershed Development Team**

- 40.** The WDT is an integral part of the PIA and will be set up by the PIA. Each WDT should have at least four members, broadly with knowledge and experience in agriculture, soil science, water management, social mobilisation and institutional building. At least one of the WDT members should be a woman. The WDT

members should preferably have a professional degree. However, the qualification can be relaxed by the WCDC with the approval of SLNA in deserving cases keeping in view the practical field experience of the candidate. The WDT should be located as close as possible to the watershed project. At the same time, it must be ensured that the WDT should function in close collaboration with the team of experts at the district and state level. The expenses towards the salaries of the WDT members shall be charged from the administrative support to the PIA. WCDC will facilitate the training of the WDT members.

## **5.4 Roles and Responsibilities of WDT**

- 41.** The WDT will guide the Watershed Committee (WC) in the formulation of the watershed action plan. An indicative list of the roles and responsibilities of the WDT would include among others, the following.
  - a.** Assist Gram Panchayat / Gram Sabha in constitution of the Watershed Committee and their functioning.
  - b.** Organizing and nurturing User Groups and Self-Help Groups.
  - c.** Mobilising women to ensure that the perspectives and interests of women are adequately reflected in the watershed action plan.
  - d.** Conducting the participatory base-line surveys, training and capacity building.
  - e.** Preparing detailed resource development plans including water and soil conservation or reclamation etc. to promote sustainable livelihoods at household level.



- f.** Common property resource management and equitable sharing.
- g.** Preparing Detailed Project Report (DPR) for the consideration of Gram Sabha.
- h.** Undertake engineering surveys, prepare engineering drawings and cost estimates for any structures to be built.
- i.** Monitoring, checking, assessing, undertaking physical verification and measurements of the work done.
- j.** Facilitating the development of livelihood opportunities for the landless.
- k.** Maintaining project accounts.
- l.** Arranging physical, financial and social audit of the work undertaken.
- m.** Setting up suitable arrangements for post-project operation, maintenance and future development of the assets created during the project period.

## **6. Institutional Arrangements at the Village Level and People's Participation**

### **6.1 Self Help Groups**

- 42.** The Watershed Committee shall constitute SHGs in the watershed area with the help of WDT from amongst poor, small and marginal farmer households, landless/assetless poor agricultural labourers, women, shepherds and SC/ST persons. These Groups shall be homogenous groups having common identity and interest who are dependent on the watershed area for their livelihood. Each Self

Help Group will be provided with a revolving fund of an amount to be decided by the Nodal Ministry.

## **6.2 User Groups**

- 43.** The Watershed Committee (WC) shall also constitute User Groups in the watershed area with the help of WDT. These shall be homogenous groups of persons most affected by each work/ activity and shall include those having land holdings within the watershed areas. Each User Group shall consist of those who are likely to derive direct benefits from a particular watershed work or activity. The Watershed Committee (WC) with the help of the WDT shall facilitate resource-use agreements among the User Groups based on the principles of equity and sustainability. These agreements must be worked out before the concerned work is undertaken. It must be regarded as a pre-condition for that activity. The User Groups will be responsible for the operation and maintenance of all the assets created under the project in close collaboration with the Gram Panchayat and the Gram Sabha.

## **6.3 Watershed Committee (WC)**

- 44.** The Gram Sabha will constitute the Watershed Committee (WC) to implement the Watershed project with the technical support of the WDT in the village. The Watershed Committee (WC) has to be registered under the Society Registration Act, 1860. The Gram Sabha may elect/appoint any suitable person from the village as the Chairman of Watershed Committee. Sarpanch and /or ward member/ Panchayat members may also be member/ Chairman of WC. The

secretary of the Watershed Committee (WC) will be a paid functionary of the Watershed Committee (WC). The Watershed Committee (WC) will comprise of at least 10 members, half of the members shall be representatives of SHGs and User Groups, SC/ST community, women and landless persons in the village. One member of the WDT shall also be represented in the Watershed Committee (WC). Funds may be released to WC.

Alternatively, the WC shall be constituted by the GS and it will be a sub-committee of GP. In such situation, WC need not be registered under Society Registration Act. Funds will be released to WC.

The States may adopt any one of the above two options.

Where the Panchayat covers more than one village, they would constitute a separate subcommittee for each village to manage the watershed development project in the concerned village. Where a watershed project covers more than one Gram Panchayat, separate committees will be constituted for each Gram Panchayat. The Watershed Committee (WC) would be provided with an independent rented office accommodation.

- 45.** The funds may be released to Watershed Committee. The Watershed Committee will open a separate bank account to receive funds for watershed projects and will utilise the same for undertaking its activities. The expenses towards the salaries of the WDT members and Secretary of Watershed Committee (WC) shall be charged from the administrative expenses under the professional support to the PIA.

## **6.4 Secretary, Watershed Committee**

**46.** The Secretary of the Watershed Committee (WC) will be selected in a meeting of the Gram Sabha. This person would be an independent paid functionary distinct and separate from the Panchayat Secretary. He would be a dedicated functionary with no responsibilities other than the assistance to the Watershed Committee (WC) and would work under the direct supervision of the President of Watershed Committee (WC) and would be selected on the basis of merit and experience. The expenses towards the honorarium to be paid to Secretary of Watershed Committee (WC) will be charged from the administrative support to the PIA. The Secretary will be responsible for the following tasks:

- a.** Convening meetings of the Gram Sabha, Gram Panchayat, Watershed Committee for facilitating the decision making processes in the context of Watershed Development Project.
- b.** Taking follow up action on all decisions.
- c.** Maintaining all the records of project activities and proceedings of the meetings of Gram Panchayat, Watershed Committee (WC) and other institutions for Watershed Development Project.
- d.** Ensuring payments and other financial transactions.
- e.** Signing the cheques jointly with the WDT nominee on behalf of the Watershed Committee.

## **6.5 Role of Gram Panchayat**

**47.** The Gram Panchayat would perform the following important functions:

- a.** Supervise, support and advise Watershed Committee from time to time.
- b.** Authenticate the accounts/ expenditure statements of Watershed Committee and other institutions of watershed project.
- c.** Facilitate the convergence of various projects/ schemes to institutions of watershed development project.
- d.** Maintain asset registers under watershed development projects with a view to retain it after the watershed development project.
- e.** Provide office accommodation and other requirements to Watershed Committee.
- f.** Allocate usufruct rights to deserving user groups/ SHGs over the assets created.

## **7. Criteria for Selection of Watershed Projects**

**48.** The following criteria may broadly be used in selection and prioritisation of watershed development projects:

- a.** Acuteness of drinking water scarcity.
- b.** Extent of over exploitation of ground water resources.
- c.** Preponderance of wastelands/degraded lands.
- d.** Contiguity to another watershed that has already been developed/ treated.

- e. Willingness of village community to make voluntary contributions, enforce equitable social regulations for sharing of common property resources, make equitable distribution of benefits, create arrangements for the operation and maintenance of the assets created.
- f. Proportion of scheduled castes/scheduled tribes.
- g. Area of the project should not be covered under assured irrigation, with relaxation for over exploited blocks.
- h. Productivity potential of the land.

## 8. Project Management

49. The major activities of the Watershed Development Projects will be sequenced into (I) Preparatory, (ii) Works and (iii) Consolidation and withdrawal Phase. In view of the expanded scope and expectations under the watershed development programme, the project duration could be in the range of four to seven years depending upon the activities and Ministries/Departments. The DPR should mention the detailed justification for the proposed project duration. The project duration may be spread over 3 different phases as decided by the Nodal Ministry and as given below:

Phase	Name	Duration
I	Preparatory Phase	1-2 years
II	Watershed Works Phase	2-3 years
III	Consolidation and Withdrawal Phase	1-2 years

## 8.1 Preparatory Phase

**50.** The major objective of this phase is to build appropriate mechanisms for adoption of participatory approach and empowerment of local institutions (WC, SHG, and UG). WDT will assume a facilitating role during this phase. In this phase, the main activities will include:

- a.** Taking up entry point activities to establish credibility of the Watershed Development Team (WDT) and create a rapport with the village community. The entry point activities, *inter-alia*, will include:
  - i.** Works based on urgent needs of the local communities such as revival of common natural resources, drinking water, development of local energy potential, augmenting ground water potential etc.
  - ii.** Repair, restoration and upgradation of existing common property assets and structures (such as village tanks) may be undertaken to obtain optimum and sustained benefits from previous public investments and traditional water harvesting structures.
  - iii.** Productivity enhancement of existing farming systems could also be an activity that helps in community mobilization and building rapport.
- b.** Initiating the development of Village level institutions such as Watershed Committees (WCs), Self-Help Groups (SHGs) and User Groups (UGs) and capacity building of different stakeholders on institutional and work related aspects.

- c.** Environment building, awareness generation, undertaking of intensive IEC activities, creating involvement and participatory responses.
  - d.** Baseline surveys needed for preparation of Detailed Project Report (DPR), selection of sites and beneficiaries. Every effort must be made to collect gender-disaggregated data to adequately reflect the situation and priorities of women.
  - e.** Hydro-geological survey of the watershed to map out zones of potential groundwater recharge, storage and sustainable groundwater utilisation.
  - f.** Building up a network of technical support agencies.
  - g.** Preparation of the DPR, including activities to be carried out, selection of beneficiaries and work-sites and design and costing of all works, ensuring that the interests, perceptions and priorities of women, dalits, adivasis and the landless are adequately reflected in the DPR.
  - h.** Working out detailed resource-use agreements (for surface water, groundwater and common/forest land usufructs) among User Group members in a participatory manner based on principles of equity and sustainability.
  - i.** Participatory monitoring of progress and processes.
- 51.** Preparation of DPR: DPR preparation is a crucial activity at the district level, which is to be facilitated by the WDT for an identified project area. The technical inputs in the form of resource maps and cadastral maps have to be made available at local level. It is necessary to capture the entire database of DPR in a systematic manner as a structured document at the initial stage itself.



- 52.** DPR preparation requires a strong PRA exercise and comprehensive beneficiary level database separately for private land and community land development with linkages to the cadastral database. This will facilitate spatial depiction of the action plan. The DPR should include, among other things, the following:
- a.** Basic Information on Watershed including rainfall, temperature, location including geographical coordinates, topography, hydrology, hydrogeology, soils, forests, demographic features, ethnographic details of communities, land-use pattern, major crops & their productivity, irrigation, livestock, socio-economic status etc.
  - b.** Details of expected/proposed User Groups & Self Help Groups, master tables for private land / common land activities, contribution to watershed development funds, information on soil and land-use, existing assets related to water harvesting, recharging and storage etc. needs to be provided plot-wise.
  - c.** Problems Typology of the Watershed including an account of the major problems requiring intervention from the perspective of enhancing livelihood potential/carrying capacity as well as conservation and regeneration of resources.
  - d.** Description of Proposed Interventions (physical and financial, including time-table of interventions) along with technical details and drawings certified by the WDT.
  - e.** Detailed Mapping exercises.

- f.** Institutional mechanisms and agreements for implementing the plan, ensuring emphasis on participatory decision-making, equity and sustainability of benefits, and post-project sustainability.
  - g.** Expected Outcomes and Benefits, especially with respect to livelihoods for different segments, benefits to women and regeneration/conservation of resources, etc.
- 53.** The DPR will be prepared by the WDT for integrated development of the watershed area with active participation of the Watershed Committee (WC). The WDT should utilize various thematic maps relating to land and water resources in the preparation and finalization of the DPR. This DPR shall necessarily include the clear demarcation of the watershed with specific details of survey numbers, ownership details and a map depicting the location of proposed work/activities for each year.
- 54.** The DPR for the watershed shall be in tune with the District Perspective Plan. The permissible works relating to soil and moisture conservation under MGNREGS, BRGF, and Artificial Ground Water Recharge must complement the micro watershed plan. District agricultural plans may also be consulted while formulating the District Perspective Plans.
- 55.** This DPR will be a part of the MIS from which details will be arranged into various layers on GIS as a monitoring, management, accounting and analytical tool besides serving as a source of information and a link to the state level data cell in the SLNA and National Data Centre. The DPR may be summed up using a standard planning tool such as Logical Framework Analysis (LFA) that includes

goals, purpose, outputs, activities, inputs, challenges and measurable indicators of progress.

- 56.** The overall responsibility for the preparation of a technically sound and high quality DPR would lie with the Project Implementing Agency (PIA). After approval by the Gram Sabha, the PIA shall submit the DPR for approval to the WCDC/DRDA/DP. Alternatively, the mechanism of approval and implementation of projects by district level committee / collector may continue to prevail.
- 57.** Each watershed has unique characteristics and problems. Its treatment and management would therefore require careful consideration of various site specific factors like topography, nature and depth of soil cover, type of rocks, water absorbing capacity of land, rainfall intensity, land use etc. All works must be planned in a location-specific manner, taking into account the above factors along with local demands and socio-economic conditions of the watershed.
- 58.** The ridge-to-valley principle with multi tier sequenced approach has been indicated in detail at Preface on Para 9(IX).

## **8.2 Watershed Works Phase**

- 59.** This phase is the heart of the programme in which the DPR will be implemented. Some of the important activities to be included in this phase are:
  - a.** Ridge Area Treatment: All activities required to restore the health of the catchment area by reducing the volume and velocity of surface runoff, including regeneration of vegetative cover in forest and common land,

afforestation, staggered trenching, contour and graded bunding, bench terracing etc.

- b.** Drainage line treatment with a combination of vegetative and engineering structures, such as earthen checks, brushwood checks, gully plugs, loose boulder checks, gabion structures, underground dykes etc.
- c.** Development of water harvesting structures such as low-cost farm ponds, nalla bunds, check-dams, percolation tanks and ground water recharge through wells, bore wells and other measures.
- d.** Nursery raising for fodder, fuel, timber and horticultural species. As far as possible local species may be given priority.
- e.** Land development including in-situ soil and moisture conservation and drainage management measures like field bunds, contour and graded bunds fortified with plantation, bench terracing in hilly terrain etc.
- f.** Crop demonstrations for popularizing new crops/varieties, water saving technologies such as drip irrigation or innovative management practices. As far as possible varieties based on the local germplasm may be promoted.
- g.** Pasture development, sericulture, bee keeping, back yard poultry, small ruminant, other livestock and micro-enterprises.
- h.** Veterinary services for livestock and other livestock improvement measures
- i.** Fisheries development in village ponds/tanks, farm ponds etc.
- j.** Promotion and propagation of non-conventional energy saving devices, energy conservation measures, bio fuel plantations etc.

## **8.3 Consolidation and Withdrawal Phase**

**60.** In this phase the resources augmented and economic plans developed in Phase II are made the foundation to create new nature-based, sustainable livelihoods and raise productivity levels. The main objectives under this phase are:

- a.** Consolidation and completion of various works.
- b.** Building the capacity of the community based organizations to carry out the new agenda items during post project period.
- c.** Sustainable management of (developed) natural resources and
- d.** Up-scaling of successful experiences regarding farm production systems/ off-farm livelihoods.

**61.** An indicative list of various activities during this phase is given below:

### **61.1 Consolidation of various works**

- a.** Preparation of project completion report with details about status of each intervention;
- b.** Documentation of successful experiences as well as lessons learnt for future use.

### **61.2 Management of developed natural resources**

- a.** Improving the sustainability of various interventions under the project;
- b.** Formal allocation of users right over common property resources (CPRs);
- c.** Collection of user charges for CPRs;

- d.** Repair, maintenance and protection of CPRs;
- e.** Sustainable utilization of developed natural resources;
- f.** Involvement of gram panchayat/corresponding institutions (as a governance body) in addressing the above aspects.

### **61.3 Intensification of farm production systems/off-farm livelihoods**

- a.** Up scaling of successful experiences related to above aspects through revolving fund under the project as well as credit and technical support from external institutions;
- b.** Promotion of agro-processing, marketing arrangements of produce and similar off – farm and informal sector enterprises.
- c.** Farmers may also be encouraged to develop non pesticidal management, low cost organic inputs, seed farms and links with wider markets to fetch competitive price.

### **61.4 Project management related aspects**

- a.** Participatory planning, implementation and monitoring of activities to be carried out during consolidation phase;
- b.** Terminal evaluation of project as per the expected outcomes.

**62.** Federations could be formed at the level of a cluster of villages in order to support economic activities at scale. These would further strengthen and activate the linkages established with external resource agencies for knowledge, credit, input procurement, sale of local produce, carrying on processing activities to the

point of exports. In these activities, bankability of activities will be attempted. At the same time, local-level institutions are expected to reach maturity and exit protocols become operative for the PIA. The Watershed Committees (WCs) may use the Watershed Development Fund for repair and maintenance of structures created in Phase II.

- 63.** The classification of activities in the three phases must not be understood in a rigid manner. Many of the Phase III activities may even start in many watersheds during Phase I and/or II itself. Phasing of activities needs to have an internal logic and integrity that must flow through the entire action plan. This will depend on a host of factors such as the prevailing initial conditions, needs and possibilities in each village, response of the community etc. Such flexibility must be built into the action plan and is to be seen as a distinguishing feature of these guidelines.

## **9. Allocation of Funds, Approval of Projects and Release of Funds**

### **9.1 Allocation of Funds to States**

- 64.** The Nodal Ministry / Department would allocate the budgetary outlay for the projects among the States keeping in view the following criteria and past performance of the state (physical and financial) viz. unspent balance, outstanding utilisation certificates, percentages of completed projects out of total projects etc except in those schemes where States have flexibility to allocate funds between watershed and other schemes.

- a.** State level perspective and strategic plans in watershed based development projects.
- b.** Percentage of rainfed area in the state to total cultivated area in the country.
- c.** Percentage of wastelands/ degraded lands in the state to the total geographical area of the country.

## **9.2 Allocation of Funds to Districts**

**65.** The State level nodal agencies will distribute funds to the districts keeping in view the following criteria:-

- a.** District level perspective and strategic plans in watershed based development projects.
- b.** Percentage of rainfed area in the district to the total cultivated area of the state.
- c.** Percentage of wastelands/ degraded lands/ panchayat lands in the district to the total geographical area of the state.

## **9.3 Approval & Sanction of Watershed Development Projects**

**66.** By the end of February each year, the States will submit detailed Annual Action Plans indicating ongoing liabilities as well as new projects which they wish to take up. The Departmental Nodal Agency at the central level will thereafter, based on total available budget for the year and the criteria as given in Para-64 and 65, allocate specific amounts for individual states from whom proposals have been



received. After States have received their allocation against ongoing and new projects, they will be free to sanction their projects within the State allocation. On receipt of the sanction orders for the new projects from SLNA; the Nodal Ministry would release funds directly to the **SLNA**.

- 67.** The distribution of budget for specific watershed projects for the various components therein is given below:

<b>Budget component</b>	<b>% of the Budget</b>
- Administrative costs	10
- Monitoring	1
- Evaluation	1
Preparatory phase, including:	
- Entry point activities	4
- Institution and capacity building	5
- Detailed Project Report (DPR)	1
Watershed Works Phase:	
- Watershed development works	56
- Livelihood activities for the asset less persons	9
- Production system and micro enterprises	10
Consolidation phase	3
<b>Total</b>	<b>100</b>

- 68.** The expenditure under the various components of the project budget will be subject to following conditions:
- i.** The payments of salaries to the WDTs/ Secretary of the Watershed Committees etc. would be exclusively charged from the administrative cost component.
  - ii.** Savings, if any, in each component of the project cost can be utilised for activity in watershed works only.
  - iii.** Purchase of vehicles and other equipments etc., and construction of buildings are not allowed. However, purchase of Computers and related software is permitted.
  - iv.** PIAs belonging to Line Departments may preferably outsource to VOs/ CBOs community mobilization and capacity building activities.
- 69.** Unit cost for watershed development of Rs. 6000 per hectare was worked out during April 2001. During 11th Plan it has been suitably revised from Rs. 6000 per ha. to Rs.12,000/ha. in plains and Rs.15,000/ ha in difficult/hilly areas in order to take care of the following three aspects: (a) promotion of livelihoods including improvement of productivity through farming systems, (b) complete coverage of area under the watershed including common/ forest land and (c) general escalation in cost of material as well as minimum wages of labourers.

## **9.4 Procedure for Release of Installments**

- 70.** The central share of funds shall be released to the **SLNA** for three phases of the implementation spread over the period in the following manner or as decided by

the Nodal Ministry.

- a.** The first instalment comprising of preparatory phase activities viz., 20% of the central share will be released straightaway upon the sanction of the project by the SLNA.
- b.** The second instalment comprising of 50% of the central share towards the project cost will be released on proper certification and submission of documents after completion of the preparatory phase and 60% expenditure of the first instalment.
- c.** The third instalment of 30% including 25% of the central share towards the works phase of the project cost and 3% for the consolidation phase will be released on proper certification of expenditure of 75% of the total funds released supported by relevant documents.

However, the existing arrangements for flow of funds by the concerned Ministries may continue if the above mechanism is not feasible.

- 71.** The release of central funds to SLNA will be made directly on the basis of specific proposals received from SLNA. The fund flow pattern will be as follows:
  - i.** Project fund relating to Watershed Works, Livelihood and Production System and microenterprises may flow from DoLR to SLNA to WCDC to WC.
  - ii.** Administrative Cost, Capacity Building, EPA, DPR, Monitoring component of project funds may flow from DoLR to SLNA to WCDC to PIA.

## **9.5 User Charges**

- 72.** The Gram Sabha through the Watershed Committee (WC) shall put in place mechanism for collecting user charges. No charge will be taken from landless, destitute or disabled / widow headed house holds for work done on private or public land. The user charges collected shall be credited to the WDF for maintenance of assets created during the project.

## **9.6 Watershed Development Fund**

- 73.** One of the mandatory conditions for the selection of villages for watershed projects is people's contribution towards the Watershed Development Fund (WDF). The Contribution of WDF shall be a minimum 10 % of cost of NRM works executed on private land only. However, in case of SC/ST, small and marginal farmers, the minimum contribution shall be 5 % of cost of NRM works executed on their land.

These contributions would be acceptable either in cash at the time of execution of works or voluntary labour. A sum equivalent to the monetary value of the voluntary labour would be transferred from the watershed project account to the WDF bank account that will be distinct from the Watershed Committee (WC) bank account. User charges, sales proceeds and other contributions, disposal amounts of intermediate usufruct rights shall also be deposited in the WDF bank account. Income earned from assets created under the project on common property resources shall also be credited to WDF.

- 74.** For other cost intensive farming system based livelihood activities/interventions such as Aquaculture, Horticulture, Agro-Forestry, Animal Husbandry etc. on

private land directly benefiting the individual farmers, the contribution of farmers will be 20 percent for general category and 10 percent for SC/ST beneficiaries and the project funds will meet the cost of farming system activity to a maximum limit of an amount equal to double of the unit cost of the project for watershed development (i.e. Rs 12,000/15,000 per ha, as the case may be). Farmers' contribution i.e. 20 percent for general category and 10 percent for SC/ST of this amount (i.e. a maximum of Rs 4800/6000 and Rs 2400/3000 as the case may be, respectively for general category and SC/ST beneficiaries) will go to WDF.

### **Example:**

- a) Assuming the total cost of farming system activity/intervention = Rs 30,000**
- Cost of farming system activity to be met from Project fund (@Rs 12,000/ha project unit cost)**
- (General category) = Rs 24,000**
- (SC/ST) = Rs 24,000**
- Farmers' contribution towards WDF**
- (General category, 20% of 24,000) = Rs 4800**
- (SC/ST, 10% of 24,000) = Rs 2400**
- b) Assuming the total cost of farming system activity/intervention = Rs 20,000**
- Cost of farming system activity to be met from Project fund (@Rs 12,000/ha project unit cost)**
- (General category) = Rs 20,000**
- (SC/ST) = Rs 20,000**
- Farmers' contribution towards WDF**
- (General category, 20% of 20,000) = Rs 4,000**
- (SC/ST, 10% of 20,000) = Rs 2,000**

Farmers' contribution to WDF in such case would be acceptable in cash at the time of execution of works.

- 75.** The Secretary, Watershed Committee (WC) shall maintain a completely separate account of the income and expenditure of the WDF. Rules for operation of the fund should be prepared by the Watershed Committee (WC) and ratified by the Gram Sabha. The WDF bank account should be operated by the President of the Gram Panchayat and any member from the SHG nominated by the Gram Sabha. Alternatively, the guidelines for the management and utilization of the WDF may be evolved by the concerned Nodal Ministry.
- 76.** After completion of Phase II, at least 50% of the WDF funds shall be reserved for maintenance of assets created on community land or for common use under the project. Works taken up on private land shall not be eligible for repair/maintenance out of this Fund. The remaining money may be used as a revolving fund to advance loans to the villagers of the project area who have contributed to the fund. Individuals as well as charitable institutions should be encouraged to contribute generously to this Fund.

## **9.7 Coordination with Other Schemes / Projects**

- 77.** Eleventh Five Year Plan offers an opportunity to converge and harmonise resources of different schemes and programmes specially those under Bharat Nirman and other flagship schemes with watershed development projects. Mandatory preparation of district level plans will be in a position to enable convergence and synergies at the grass-root level. The DPR may elaborate gaps to be filled or watershed activities to be taken up out of BRGF, MGNREGS, artificial ground water recharging, renovation and repairs of tanks, water bodies and any other available sources. Marketing and value addition is also possible

under the revised APMC Act. Efforts should be made to converge all relevant schemes at project level.

## **9.8 Foreclosure of Projects**

- 78.** Despite the best intentions on the part of the authorities and participating communities, despite the careful preparation of the detailed project report, and even despite careful monitoring, there would still be instances of projects which may still get stalled or from a particular point onwards, make no progress whatsoever. In such extreme cases where pursuing the project further would only be a waste of time, energy and resources, the extreme step of foreclosure may be resorted to. The project work should start within three months of the receipt of first instalment by WCDC / agency. This is to be judged from expenditure statement, failing which project will be withdrawn and released instalment will be adjusted in release of other projects to the State.
- 79.** Steps can also be initiated for suo-moto foreclosure by the State / Central Government under the following circumstances:
- a.** Consistent apathy on the part of State and District Level Authorities towards the project.
  - b.** Non-submission of DPR / approved work plan for two years after the expiry of preparatory phase without any valid justification.
  - c.** If any matter relating to project is subjudice in any court of law and no order for staying the project activity has been passed by the court.
  - d.** Any other reason which justifies foreclosure as decided by District/State/ Centre from time to time.

## **10. Capacity Building Strategy**

**80.** Capacity building support is a crucial component to achieve the desired results from watershed development projects. These Guidelines broadly define the contours of the capacity building strategy for watershed development projects in the country. NRAA would facilitate the evolution of operational strategies for capacity building in each state in consultation with SLNA and other resource organizations. The capacity building strategy and activities enumerated below by NRAA, Nodal Agencies at the central level, consortiums of resource organizations should be funded separately over and above the earmarked budget for institution and capacity building in the preparatory phase of the watershed development project.

### **10.1.Key Elements of Capacity Building Strategy**

**81.** NRAA will collaborate with various resource organizations for developing national level as well as state specific capacity building strategies. Key Components of Capacity Building Strategy are the following:

- Dedicated and decentralised institutional support and delivery mechanism
- Annual Action Plan for Capacity Building
- Pool of resource persons
- Well prepared training modules and reading materials
- Mechanism for effective monitoring and follow-up.



## 10.2 Resource Organizations and Developing Partnerships

- 82.** National Institute of Rural Development (NIRD), National Institute of Agricultural Extension Management (MANAGE), Central Arid Zone Research Institute (CAZRI), Central Soil and Water Conservation Research and Training Institute (CSWCRTI) and its regional centres, Central Research Institute for Dry land Areas (CRIDA), Water Technology Centres (WTCs), Indian Institute of Remote Sensing, Dehradun, Institute of Rural Management, Anand (IRMA), Indian Institute of Forest Management (IIFM), National Remote Sensing Centre (NRSC), Indian Space Research Organization (ISRO), Soil and Land Use Survey of India (SLUSI) are some of the well known national level institutions that could impart capacity building inputs to senior government officers at national/ state/ district levels.
- 83.** There are also several reputed voluntary organizations/ resource organizations with considerable expertise and experiences related to watershed development projects such as AKRS (P) (Gujarat), MYRADA (Karnataka), WOTR (Maharashtra), Dhan Foundation (Tamilnadu), Samaj Pragati Sahyog (MP), Development Support Center (Gujarat), AFARM (Maharashtra), WASSAN (Andhra Pradesh), ARAVALI (Rajasthan), PRADAN (Jharkhand), CYSD (Orissa), Seva Mandir (Rajasthan) and so on, in different parts of the country. Some of them are already functioning as resource organizations for watershed development projects in collaboration with state governments.
- 84.** NRAA would help the State Governments in preparing the comprehensive list of all such resource organizations across the country and profile their expertise and capacities. As part of this process, NRAA and SLNA identify National/ State/

District level resource organizations. Based on this analysis, NRAA facilitates formal partnerships between the Ministries/Departments/ SLNA/ WCDC and resource organizations from government/ voluntary/ ICAR backgrounds. These resource organizations could operate at national/ state/ district/ sub district level, depending on the need and capacity building strategy of each state. SLNA develops clear Terms of References (ToRs) with resource organizations. Depending on the need, NRAA / SLNA could also form Consortium of Resource Organizations to provide necessary capacity building support to the watershed development projects at various levels.

## **11. Monitoring, Evaluation and Learning**

### **11.1 Monitoring**

- 85.** Regular monitoring of the project will have to be carried out at each stage. Online monitoring must become a feature of all projects. Monitoring should include process and outcome monitoring. The PIA shall submit quarterly progress reports (countersigned by the Watershed Committee (WC) President) to the WCDC for further submission to the SLNA. The WCDC will have one member exclusively responsible for monitoring.
- 86.** Different streams of monitoring are proposed. The role of the SLNA is critical in ensuring that the following systems are followed at the appropriate levels:
- Internal Monitoring by project teams (PIA/WCDC)
  - Progress Monitoring

- GIS/ Web Based On-Line Monitoring
- Self Monitoring by communities
- Sustainability Monitoring
- Social Audits
- Independent and External Monitoring by independent agencies
- Process Monitoring

## **11.2 Evaluation**

- 87.** There will be a national panel of Evaluating Agencies in each Ministry. A minimum percentage of evaluations and impact studies will be carried out by national level agencies that will ensure objectivity as well as infuse a national perspective.
- 88.** There will also be an SLNA panel of evaluators, approved by the Departmental Nodal Agency at central level. The panel will include only institutions and agencies – not individuals. The SLNA will enter into a formal contract with these agencies. The WCDC may choose any agency from the SLNA approved panel, the only condition being that the agency should not belong to the area being evaluated.
- 89.** Each evaluation will include physical, financial and social audit of the work done. Evaluators are to be seen not so much as inspectors but as facilitators. However, they will be very strict in ensuring that these guidelines are being followed. Fund release will depend on a favourable report from the evaluators.

- 90.** The concurrent and Post-Project evaluation would be conducted to assess the status of watershed related interventions. A separate set of guidelines on evaluation will be issued in due course by the respective Ministries.

### **11.3 Learning**

- 91.** Systematic efforts are to be made by the WDT/WC to learn from the field experiences as also from feedback of independent sources. The following methods are proposed to enable the learning process at different levels.
- a.** Systematic analysis of monitoring data (all types of monitoring) on a regular basis by internal team and sharing with project authorities/ policy makers.
  - b.** Engaging services of independent academic and voluntary organizations by the WCDC, for taking up research and action research projects.
  - c.** Initiating pilots on new themes and innovative models.
  - d.** Organizing regular sharing, reflective and learning events to learn from field experiences, monitoring exercises and academic/ research studies. These events could be organized at district, state and national level.

### **11.4 Outcomes / End Results**

- 92.** Each Watershed Development Project is expected to achieve the following results by the end of the project period:
- a.** All the works/activities that are planned for the treatment and development

of the drainage lines, arable and non-arable lands in the watershed area are completed with the active participation and contribution of the user groups and the community at large.

- b.** The user groups/panchayats have willingly taken over the operation and maintenance of the assets created and made suitable administrative and financial arrangements for their maintenance and further development.
- c.** All the members of the Watershed Committee and staff such as Watershed Secretary and Volunteers have been given orientation and training to improve their knowledge and upgrade technical/management and community organisational skills to a level that is appropriate for the successful discharge of their responsibilities on withdrawal of the Watershed Development Team from the Project.
- d.** The village community would have been organised into several, homogeneous self-help groups for savings and other income generation activities which would have achieved sufficient commitment from their members and built up financial resources to be self sustaining.
- e.** The increase in cropping intensity and agricultural productivity reflecting in overall increase in agriculture production.
- f.** Increase in income of farmers/ landless labourers in the project area.
- g.** Increase in groundwater table due to enhanced recharge by watershed interventions.

## ACRONYMS

BRGF	Backward Regions Grant Fund
CAPART	Council for Advancement of People's Action & Rural Technology
CAZRI	Central Arid Zone Research Institute
CEO	Chief Executive Officer
CPRs	Common Property Resources
CRIDA	Central Research Institute for Dry Land Agriculture
CSWCRTI	Central Soil & Water Conservation Research & Training Institute
DDP	Desert Development Programme
DoLR	Department of Land Resources
DP	District Panchayat
DPAP	Drought Prone Areas Programme
DPC	District Planning Committee
DPR	Detailed Project Report
DRDA	District Rural Development Agency
GIS	Geographical Information System
GP	Gram Panchayat
GPS	Global Positioning System
GS	Gram Sabha
ICAR	Indian Council of Agricultural Research
ICRISAT	International Crops Research Institute for Semi-Arid Tropics
IEC	Information, Education and Communication

IIFM	Indian Institute of Forest Management
IRMA	Institute of Rural Management, Anand
ISRO	Indian Space Research Organization
IT	Information Technology
IWDP	Integrated Wastelands Development Programme
JFMC	Joint Forest Management Committee
LFA	Logical Framework Analysis
MANAGE	National Institute of Agricultural Extension Management
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MoRD	Ministry of Rural Development
MOU	Memorandum of Understanding
NABARD	National Bank for Agriculture & Rural Development
NAEP	National Afforestation & Eco-development Project
NDC	National Data Centre
NGO	Non-Governmental Organization
NIRD	National Institute of Rural Development
NRAA	National Rainfed Area Authority
NRSC	National Remote Sensing Centre
NWDPPRA	National Watershed Development Project for Rainfed Areas
PIAs	Project Implementing Agencies
PRA	Participatory Rural Appraisal

RVP&FPR	River Valley Project & Flood Prone River Project
SAUs	State Agricultural Universities
SC	Scheduled Caste
SGRY	Sampoorna Grameen Rojgar Yojana
SHGs	Self Help Groups
SIRDs	State Institute of Rural Development
SGSY	Swarnjayanti Gram Swarozgar Yojana
SLPSC	State Level Project Sanctioning Committee
SSR	Standard Schedule of Rates
ST	Scheduled Tribe
SVOs	Support Voluntary Organizations
SLNA	State Level Nodal Agency
SWAN	State Wide Area Network
UGs	User Groups
VOs	Voluntary Organisations
WC	Watershed Committee
WCs	Watershed Committees
WCDC	Watershed Cell cum Data Centre
WDF	Watershed Development Fund
WDT	Watershed Development Team
WTCs	Water Technology Centres



## Publications of NRAA

<b>1</b>	Harmonization of Wasteland/ Degraded land Datasets of India	<b>2008</b>
<b>2</b>	Common Guidelines for Watershed Development Projects (English)	<b>2008</b>
<b>3</b>	Common Guidelines for Watershed Development Projects (Hindi)	<b>2008</b>
<b>4</b>	Hiware Bazar – An Experience in Integrated Natural Resource management – (Success Stories Series: 1)	<b>2008</b>
<b>5</b>	Soybean Based Farming Systems for Improving Livelihood of Rainfed Areas (Policy paper – 1)	<b>2008</b>
<b>6</b>	Harnessing Opportunities In Rainfed Areas (Vision-2025)	<b>2009</b>
<b>7</b>	Rainfed Livelihoods - Progressive Paradigms (Position Paper – 1)	<b>2009</b>
<b>8</b>	Drought Mitigation Strategies (Position Paper 2)	<b>2009</b>
<b>9</b>	Food Security, Water and Energy Nexus – (Position Paper – 3)	<b>2009</b>
<b>10</b>	High Rainfall/ Flood Management Strategies (Position Paper 4)	<b>2009</b>
<b>11</b>	Perspectives and Problems of Primary Producers Companies (Case Studies No. 1)	<b>2009</b>
<b>12</b>	Farmer – Industry Partnership for Diversified Livelihood and Raw Material Production – An ITC Case Study - (NRAA Case Study: 2)	<b>2009</b>
<b>13</b>	Report of Central Team on Drought Mitigation Strategy for Bundelkhand Region of Uttar Pradesh and Madhya Pradesh – (Report No. 1)	<b>2009</b>
<b>14</b>	Project Proposal (Mini DPR) for Simultaneous Treatment of Fringe Forest and Adjoining Non-Forestlands for Conservation of Water, Bio-Diversity, Sustainability of JFM and Poverty Alleviation	<b>2009</b>
<b>15</b>	Challenges of Food Security and its Management –(Position Paper 5)	<b>2011</b>
<b>16</b>	Monitoring and Evaluation of Artificial Recharge of Ground Water Programmes/ Schemes/ Projects in the Rainfed Regions of Maharashtra –(Study Report 3)	<b>2011</b>
<b>17</b>	Technologies for Increasing Production of Rabi Crops in Bundelkhand – (Technical Bulletin No: 1)	<b>2011</b>
<b>18</b>	Impact of High Rainfall/ Floods on Ground Water Resources in the Krishna River Basin (During – 1999-2009) (Study Report-2)	<b>2011</b>