

# WATERSHED DEVELOPMENT GUIDELINES

(Revised 2001)

## Introduction

1. The Watershed approach has conventionally aimed at treating degraded lands with the help of low cost and locally accessed technologies such as in-situ soil and moisture conservation measures, afforestation etc. and through a participatory approach that seeks to secure close involvement of the user-communities.

2. The broad objective was the promotion of the overall economic development and improvement of the socio-economic conditions of the resource poor sections of people inhabiting the programme areas. Many projects designed within this approach were, at different points of time, taken up by the Government of India. The Drought Prone Areas Programme (DPAP) and the Desert Development Programme (DDP) were brought into the watershed mode in 1987. The Integrated Wasteland Development Programme (IWDP) launched in 1989 under the aegis of the National Wasteland Development Board also aimed at the development of wastelands on watershed basis.

3. All these three programmes were brought under the Guidelines for Watershed Development with effect from 1.4.1995. Other major programmes now being implemented through this approach are the National Watershed Development Project in Rainfed Areas (NWDPR) and the Watershed Development in Shifting Cultivation Areas (WSDCA) of the Ministry of Agriculture (MoA).

4. The focus of these programmes has, with the advent of the Department of Land Resources (DoLR) shifted to the enhancement of the viability and quality of rural livelihood support systems.

5. While the programmes of DoLR are designed to address areas characterized by a relatively difficult terrain and preponderance of community resources, those of Ministry of Agriculture are expected to aim at increasing production and enhancing productivity in cultivated areas largely privately owned.

6. While the focus of these programmes may have differed, the common theme that underpinned their structure has been the basic objective of land and water resource management for sustainable development of natural resources and community empowerment. The Prof. Hanumantha Rao, Committee, constituted by the MoRD studied the implementation and impact of the Drought Prone Areas Programme and the Desert Development Programme all over the country and recommended a common set of operational guidelines, objectives, strategies and expenditure norms for watershed development projects integrating the features of the three programmes under the MoRD. Accordingly, the Guidelines for Watershed Development were framed and brought into force with effect from 1<sup>st</sup> April 1995.

## Need for revision

7. More than six years have elapsed since the first set of projects was sanctioned under the Guidelines. Meanwhile, a number of studies have been conducted, evaluations made and soundings taken in various for a culminating in the emergence of many suggestions in regard

to making the guidelines contemporary, transparent and easy to follow. The need has also been felt to infuse a greater degree of flexibility into the Guidelines in view of the large variation in local conditions, needs and the social structure. Detailed consultations were, therefore, organised with the State Governments, Project Implementation Agencies, NGOs and other experts involved in the implementation of Watershed Development Projects under different Programmes. In fact, Prof. Hanumantha Rao himself has brought out some of the emerging issues and their immediate redressal in his Lovraj Kumar Memorial Lecture 2000. Encompassing all these innovations in one place and making the intentions more specific, the Guidelines for Watershed Development (2001) have now been reformulated inter-alia, to ensure: -

- a. Programme-specific and focused project approach,
- b. Greater flexibility in implementation,
- c. Well -defined role for State, District and Village level Institutions,
- d. Removal of overlaps,
- e. A provision for keeping the Watershed Development Projects on probation,
- f. An "Exit Protocol" for the PIAs,
- g. A "Twin track" approach to the implementation of projects,
- h. Seeking a combination of GO/NGO as PIA,
- i. A greater role of women,
- j. An effective role for the Panchayat Raj Institutions,
- k. Bringing to centre-stage SHGs comprising rural poor, especially those, belonging to SC/ST categories.
- l. Establishing a credit facility from financial institutions,
- m. Transparency in implementation,
- n. Effective use of remote sensing data furnished by NRSA.

### **Applicability**

8. These Guidelines are applicable to IWDP, DPAP and DDP and any other programme notified by the Government of India. The Watershed Development Projects under DPAP/DDP will be taken up in the Blocks notified under respective Programmes. Such Projects, under IWDP will generally be implemented in the Blocks other than those notified under DPAP/DDP as well as the Blocks having similar projects under International Cooperation Schemes such as Sustainability of Livelihood/Watershed Development projects funded by international donor agencies.

### **Watershed Area**

9. A watershed is a geo-hydrological unit, which drains into common point. The watershed approach is a project based, ridge to valley approach for in situ soil and water conservation, afforestation etc. Unit of development will be a watershed area of about 500 ha. each in watershed development projects. However, the actual area of a project may vary keeping in view the geographical location, the size of village etc. The thematic maps generated from satellite data for different themes such as land use/land cover, hydro geo -morphology, soils etc. may be used for selection of a watershed area. The project will primarily aim at treatment of non-forest wastelands and identified drought prone and desert areas. However, if any watershed area consists of some forestlands, it should also be treated simultaneously under the project as provided in para 16 of these Guidelines.

## Scope

**10.** These Guidelines should be taken as general principles for implementation of watershed development projects and should not be used as a tool to make their implementation a complex exercise. The basic philosophy of these general principles is to seek gainful and transparent utilization of public funds for watershed development, with a view to promoting the overall economic development and improving the socio-economic condition of the resource poor and the disadvantaged sections of the people inhabiting the project areas. The State Watershed Development Committees (para 19) are empowered to clarify the provisions of these Guidelines to suit local social, infrastructure and geographical problems subject to the basic philosophy mentioned earlier on.

**11.** The objectives of Watershed Development Projects will be: -

- i. Developing wastelands/degraded lands, drought-prone and desert areas on watershed basis, keeping in view the capability of land, site-conditions and local needs.
- ii. Promoting the overall economic development and improving the socio-economic condition of the resource poor and disadvantaged sections inhabiting the programme areas.
- iii. Mitigating the adverse effects of extreme climatic conditions such as drought and desertification on crops, human and livestock population for their overall improvement.
- iv. Restoring ecological balance by harnessing, conserving and developing natural resources i.e. land, water, vegetative cover.
- v. Encouraging village community for :
  - *Sustained community action for the operation and maintenance of assets created and further development of the potential of the natural resources in the watershed.*
  - *Simple, easy and affordable technological solutions and institutional arrangements that make use of, and build upon, local technical knowledge and available materials.*
- vi. Employment generation, poverty alleviation, community empowerment and development of human and other economic resources of the village.

## Implementation

**12.** These programmes will be implemented, mainly, through the Zilla Parishads (ZPs)/District Rural Development Agencies (DRDA). However, wherever it is expedient in the interest of Watershed Development Programmes, the projects can be implemented through any Department of the State Government or autonomous agencies of Central Government or State Governments with the approval of the Department of Land Resources, Government of India.

## Sanction of Projects

**13.** The projects will be sanctioned by Government of India as per procedure in vogue at the time of adoption of these revised guidelines. The Department of Land Resources, Government of India, may amend or relax this procedure from time to time. In case of interpretation of any of the provision of these guidelines, the Department of Land Resources will be the final authority. However, the Department of Land Resources may sanction

projects for treatment of wastelands in Special Problem Areas such as high altitude regions, land slide areas, slopes having more than 30 degree gradient or for any other specified technical reason. These projects need not necessarily be implemented through participatory mode and may be implemented on intensive treatment specific departmental approach.

### **Preparation of a Perspective Plan**

**14.** The Department of Land Resources has brought out the Wastelands Atlas of India in May 2000 in collaboration with NRSA Hyderabad. The State Governments are expected to prepare a long-term perspective plan for treatment of wastelands/degraded lands, drought prone and desert areas over a period of 15 years. This plan should keep in view the availability of funds under IWDP, DPAP, DDP and other such programmes being implemented through International Cooperation projects and other agencies. In most of the States, State Remote Sensing Application Centres have developed watershed-wise Atlas showing code Nos. These code numbers should be specified in the perspective plan indicating already treated watershed areas, ongoing project areas and new project areas to be taken up in a phased manner.

### **Criteria for Selection of Watersheds**

**15.** The following criteria may broadly be used in selection of the watersheds:

- a. Watershed area may be about 500 ha. However, if on actual survey, a watershed is found to have slightly less or more area, the total area may be taken up for development as a project. Even small contiguous watersheds with an approximate total area of 500 hectares may be taken up for development.
- b. In case a watershed falls in two villages, it should be divided into two sub watershed areas confined to the designated villages. Care should be taken to treat both the sub watershed areas simultaneously.
- c. Watershed, which has acute shortage of drinking water.
- d. Watershed, which has a large population of scheduled castes/scheduled tribes dependent on it.
- e. Watershed that has a preponderance of non-forest wastelands/degraded lands.
- f. Watershed, which has a preponderance of common lands. However, in view of the fact that watershed development aims at poverty alleviation by improving productivity of land and generation of employment, projects not having preponderance of common lands may also be considered for sanction provided there is adequate justification.
- g. Watersheds where actual wages are significantly lower than the minimum wages.
- h. Watershed, which is contiguous to another watershed that has already been developed/ treated.
- i. Watersheds where People's participation is assured through raw materials, cash, contribution on labour etc. for its development as well as for the operation and maintenance of the assets created.

### **Development of Forest Lands in Watershed Areas**

**16.** Some watersheds may encompass, in addition to arable land under private ownership, forestland under the ownership of State Forest Department. Since nature does not recognize artificial boundaries of forest and non-forest lands in any watershed, the entire watershed is to

be treated in an integrated manner. Though the criterion for selection of watersheds primarily remains predominance of non-forest lands, the forest lands forming part of such watersheds may also be treated simultaneously as detailed below:

- a. The Divisional Forest Officer concerned should give technical sanction of the treatment plans.
- b. The programme should as far as possible be implemented by Village Forest Committees existing in that area. If no such Committee exists, their formation may be encouraged, or else the project activities in such watersheds should be taken up by the Forest Department.
- c. Village Forest Committees should be treated at par with Watershed Committee. Since Village Forest Committees are registered with the Forest Department of the respective States, there would not be any need for getting them registered under the Societies Registration Act.
- d. The Micro-watershed Development Plan for the forest areas should be in conformity with the Forest Conservation Act and the approved working plan of the area.
- e. Where a relatively larger proportion of the watershed is covered by forestlands, Forest Department at the district level should be encouraged to take up the work of development as Project Implementation Agency.
- f. A forest official should invariably be included as a member of the Watershed Development Team wherever forestland falls within the watershed.

#### **Date of Project Commencement**

**17.** The date of sanction of the project shall be date of project commencement for all purposes. The project shall be implemented over a period of five years from the date of sanction.

#### **State Watershed Development Committee (SWDC)**

**18.** To ensure coordination among various Government Departments/Institutions and Voluntary Agencies, a State Watershed Development Committee shall be constituted under the Chairmanship of Additional Chief Secretary /Agricultural Production Commissioner/ Development Commissioner. Secretaries & Heads of Departments of Rural Development, Panchayati Raj, Forests, Soil Conservation, Horticulture, Agriculture, State Remote Sensing Centre, Harijan and Tribal Welfare, two representatives of prominent NGOs working in the field of watershed development, two prominent Women representatives, one representative of State Training Institutions in related field will be the members of the Committee. A designated Department in the State Government shall be the nodal Department to service this Committee and to supervise the implementation of Watershed Development Programmes.

**19.** This Committee may meet twice a year to monitor, review and evaluate the progress of implementation of the Watershed Development Programmes. If there is adequate justification, the Committee may recommend relaxation of the cost norms for a specific project especially in difficult areas.

**20.** The ZP/District Rural Development Agency shall be normally the authority competent to decide on the suitability or otherwise of the Project Implementation Agency for taking up Watershed Development Projects. However, the State Government will be competent to

change the Project Implementation Agency. In case of change of PIA in the projects under IWDP, prior concurrence of Department of Land Resources, Govt. of India will be necessary.

### **District Watershed Development Committee (DWDC)**

21. To ensure coordination at district level, a District Watershed Committee shall be constituted under the Chairman, Zilla Parishad or DRDA as the case may be. It shall consist of CEO/PD, ZP/DRDA and district level officers of the line departments associated with the implementation of watershed Development projects, one representative of the State Remote Sensing Centre, one member from the relevant Research and Training institutions in the district, one NGO representative, at least two prominent women workers and one prominent social worker. The District Watershed Development Committee will advise and assist the ZP/DRDA on matters, regarding selection of PIAs, members of Watershed Development teams, training, community organisation, publicity campaigns and such other items/activities. The Committee will also approve the detailed action plan for watershed development projects in the district. It should meet at least once in a quarter and review the progress of the watershed Development projects, assist in resolving management and administrative problems, guide in implementation, identify policy issues, if any, for reference to the State Government /Government of India.

22. ZPs/DRDAs or any other Institution in whose favour the watershed development projects have been sanctioned shall be fully responsible for their implementation. The CEO, ZP/PD, DRDA will be the Member Secretary of the DWDC. The ZP/DRDA at the district level shall have the right and responsibility to monitor and review the implementation of the programme. The CEO / PD of DRDA /ZP shall maintain the accounts of watershed development projects and shall sign all the statutory papers, such as, UCs, Audited Statements of Accounts, Progress Reports, Bonds etc.

### **Role of Panchayati Raj Institutions (PRI)**

23. The Zilla Parishads and other Panchayati Raj Institutions (PRIs) shall have very important role to play in Watershed Development Programmes. Wherever the DRDA has been made responsible for implementation of the watershed programmes, the Chief Executive Officer of the Zilla Parishad shall be a member of the DWDC. The PRIs shall have the right to monitor and review the implementation of the programme and provide guidance for improvements in the administrative arrangements and procedures with a view to ensure convergence of other programmes of Ministry of Rural Development such as JGSY, SGSY, IAY, CRSP, Rural Drinking Water Supply etc.

24. At the Village level, the Gram Panchayat shall be fully involved in the implementation of the programme, specially community organisation and training programmes. It may use its administrative authority and financial resources to support and encourage the formation of SHGs/UGs, the operation and maintenance of the assets created during project period and the common property resources such as pasture lands, fisheries tanks, plantations on village common lands, etc. The Gram Panchayats may also ensure that funds from other developmental programmes of MoRD are used to supplement and complement the Watershed Development Programmes. The Gram Panchayat shall be empowered to review and discuss the progress of watershed development programme in its meetings. The watershed action plan should have the approval of Gram Sabha and it should be a part of annual action plan of Gram Sabha. The Secretary, Watershed Committee shall provide all information in respect of



action plan, funds earmarked for various activities, details of expenditure progress of works and future plan of action to the Gram Panchayat/ Gram Sabha.

25. The ZP/DRDA in whose favour the project has been sanctioned will be entitled to affect recovery of funds from any institutions/organisations/individuals and take appropriate action under law if the project is not properly implemented or funds are misutilised or not spent as per Guidelines.

26. The Zilla Parishads, Panchayat Samitis and the Gram Panchayats are also entitled to take on the responsibility of implementing a cluster of watershed projects in the capacity of Project Implementation Agencies, if they so desire. However, in all such cases, they shall also follow the norms prescribed for PIAs under these Guidelines.

### **Project Implementation Agencies (PIA)**

27. While the ZP/DRDA shall administer the Watershed Development Programmes under the supervision and guidance of the State Governments and Government of India, the projects at the field level shall be implemented by the Watershed Committees under the overall supervision and guidance of Project Implementation Agencies (PIAs). The PIA shall normally be assigned 10-12 Watershed projects covering an area ranging from 5000-6000 hectares. However, if a PRI/Government Department has adequate infrastructure, it can be assigned more projects on the specific recommendations of the State Government concerned. It shall engage a four member Watershed Development Team (WDT). The PIA should preferably be selected from amongst PRIs failing which it may be a Government Department or a reputed Non Government Organization/Body Corporate registered under any of the legislation such as the Societies Act, the Cooperative Societies Act, Companies Act or any other special statute. Wherever feasible, ZPs/DRDAs may implement a project through a combination of Government and Non-Government Project Implementation Agencies where community mobilisation may be done by the Non-Govt. PIA & bio physical activities by Government PIA.

28. An NGO is eligible for selection as PIA only if it has been active in the field of watershed development or any similar area developmental activities in rural areas for some years. There is no bar for a PIA to take up two or more cluster of projects provided it has the requisite capacity and capability. However, one NGO may not normally be given more than a total of 12,000 ha. area in all the programmes of similar nature to develop in a district and 25,000 ha. in the State. This will encourage more NGOs in the field of watershed development. Due consideration and preference should be given to those institutions, which have done their basic homework in identifying villages/watersheds/areas where they would prefer to work. Past experience in/or near by selected villages and quantum of funds handled by the PIA in last 3 years may be taken into account for their selection by the ZP/DRDA. The non-Governmental Organisations black listed by CAPART or other Departments of State Government and Government of India should not be appointed as PIAs.

29. The Project Implementation Agencies (PIAs) will motivate the Gram Panchayats to pass necessary resolutions to make public contributions, conduct Participatory Rural Appraisal (PRA) exercises, prepare the development plans for the watershed, undertake community organisation and training for the village communities, provide technical guidance and supervision of watershed development activities, inspect and authenticate project accounts, undertake action research to adapt low-cost technologies and/or validate 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.

### **Watershed Development Team (WDT)**

30. Each PIA shall carry out its duties through a multi-disciplinary team designated as the Watershed Development Team (WDT). Each WDT may handle 10-12 watershed development projects and may have at least four members one each from the disciplines of Forestry / Plant science, animal sciences, civil /agricultural engineering and social sciences. At least one member of the WDT should be a woman. Preferable qualification for a WDT member would be a professional degree. However, qualification can be relaxed by the ZP/DRDA in deserving cases keeping in view the practical field experience in respective discipline. One of them shall be designated as the Project Leader. The PIA will be at liberty to either earmark its own staff exclusively for this work, or engage fresh candidates including retired personnel, or take people on deputation from government or other organisations. The establishment charges for the WDT shall be subject to the limits prescribed in Annexure – I and debited to the Watershed Development Projects. The WDT shall be located at the PIA/ Block headquarters/any other small town nearest to the cluster of selected villages. The appointment of the WDT must be completed within a period of two months from the date of nomination of PIA, failing which the ZP/DRDA shall have the right to cancel the nomination of the PIA and attach the villages to some other PIA.

### **Self-Help Group (SHG)**

31. The PIA shall constitute Self Help Groups (SHGs) in the watershed area with the help of WDT. These Groups shall be homogenous groups having common identity who are dependent on the watershed area such as agricultural labourers, land less persons, women, shepherds, scheduled castes/scheduled tribes persons. Around 50% of villagers i.e. who are directly or indirectly dependent on the watershed, should generally be enrolled as members of at least one Self-Help Group. Separate Self-help Groups should be organised for Women, scheduled castes, scheduled tribes etc.

### **User Group (UG)**

32. The PIA shall also constitute User Groups (UGs) in the watershed area with the help of WDT. These Groups shall be homogenous groups, who may be most affected by each work/activity and shall include the persons having land holding within the watershed areas. Each UG shall consist of the persons who are likely to derive direct benefits from a particular watershed work or activity. The UGs should actually take over the operation and maintenance of the completed community works or activities on common property resources.

### **Watershed Association (WA)**

33. Where a watershed is coterminous with a Village Panchayat or its area is confined within the boundaries of a Village Panchayat, the Gram Sabha of the Panchayat concerned will be designated as the Watershed Association. However, where a watershed comprises of areas coming under the jurisdiction of more than one Panchayat, members of the community who are directly or indirectly dependent upon the watershed area, will be organised into a Watershed Association. Such a Watershed Association should be registered as a Society



under the Registration of Societies Act, 1860. The Watershed Association will meet, at least, twice a year to evolve/improve the watershed development plan, monitor and review its progress, approve the statement of accounts, formation of user groups/self-help groups, resolve differences of disputes between different user groups, self-help groups or amongst members of the user groups/self-help groups, approve the arrangements for the collection of public/voluntary donations and contributions from the community and individual members, lay down procedures for the operation and maintenance of assets created, approve the activities that can be taken up with money available in the Watershed Development Fund, nominate members of the Watershed Committee from amongst the user groups/ self-help groups by a system of rotation, and take disciplinary action of removal of membership from the Watershed Committee or user groups and whatever other disciplinary action it deems fit. The WA will elect its own President, who shall also be the Chairman of the Watershed Committee. The Watershed Secretary shall assist the President of WA in the discharge of the responsibilities entrusted to the WA.

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

34. Subject to the overall supervision and control of the Watershed Association, a Watershed Committee shall carry out the day-to-day activities of the Watershed Development Project. The Watershed Committee may consist of 10-12 members who will be nominated by the Watershed Association from amongst the user groups (4-5), self-help groups (3-4), Gram Panchayat (2-3) and a member of the Watershed Development Team. While making nominations, it may be ensured that the Committee has at least one-third representation of women. There should be adequate representation of members from the Scheduled Castes/Scheduled Tribes etc. Needless to stress, the Watershed Committee will be responsible for coordination and liaison with the Gram Panchayat, the Watershed Development Team, the DRDA/ZP and Government Agencies concerned to ensure smooth implementation of the Watershed Development Project. The WC shall meet at least once in a month on pre decided date.

### **Watershed Secretary (WS) & Volunteers**

35. Each watershed development project shall have a Watershed Secretary engaged by the Watershed Association. He should preferably be a matriculate from the same village or at least from a nearby village and agree to live in the watershed village during the project period. In case of non-availability of such a person, a moderately educated person of the village with good writing and reading skills sufficient for maintaining records and accounts of the project may be engaged to function as WS. He will work under the direct supervision of the Chairman of the WC and will be responsible for convening meetings of the WA /WC and for carrying out all their decisions. He will maintain all the records of project activities and proceedings of the meetings of WC and the WA. He will also maintain accounts. If the PIA feels it is necessary that volunteers should assist the Secretary, the WC may be permitted to provide not more than two volunteers to assist the Watershed Secretary. Watershed Secretary as well watershed volunteers shall be engaged on honorarium basis subject to the ceiling prescribed in Annexure- I. They shall not be treated as employee of watershed Committee/PIA/DRDA/ZP/State Government/Government of India.

### **Participatory Rural Appraisal, Community Organisation & Entry Point Activities**

**36.** Participatory Rural Appraisal (PRA) is one of the most important exercises in watershed development projects before finalization of action Plan. In fact the watersheds should be selected after due PRA and the watersheds with greater participatory response should be preferred. After sanction of project, the WDT should tour the watershed area extensively and organize various self-help groups, UGs and other groups. As a part of confidence building exercise, some community benefiting entry point activities can be taken up by the PIA directly. The treatment plan and interventions should be decided after elaborate PRA exercise. These activities can be renovation of village level school, Panchayat buildings, community houses, Common places, drinking water sources/ wells, bathing ghats, approach roads to water tanks, village roads, village sanitation improvement works etc. Water harvesting measures and improvement of drinking water sources should be preferred over other activities. The entry point activities can be undertaken out of the grant available for community organisation. Religious activities and activities for individual benefits are not permitted.

### **Capacity Building & Training**

**37.** Capacity Building is an important aspect for the successful implementation of watershed development programmes. ZP/DRDA shall ensure that relevant training programmes are organised for all the functionaries involved in watershed development. PIA may ensure that a majority of the members of SHGs/UGs are given basic training involving skill upgradation and orientation on the technical and organisational aspects of the running of these Groups. Besides, training on application of Remote Sensing Technology for generating database for watershed development should be included in the training Programme. Generally, the training should be organised by the WDT members with the help of local officials of technical departments/institutions, VAs etc. Guest faculties invited may be paid an honorarium as per norms prescribed by the State Government. The SHG/UG members could also be taken for visits to Research Stations/successful watersheds/Kisan Vikas Kendras etc. where they could see the demonstration of successful technologies/practices/designs that are relevant to them. Use of audio Visual media to increase awareness and motivation among SHG/UG members should be encouraged.

**38.** Training and community mobilisation are a pre-requisite before initiating developmental work in the watershed projects. Prior sensitization and orientation training should be imparted to all senior functionaries including PDs/CEOs at the district/block levels on Watershed Project Management before they resume their responsibilities. The Training Programmes organised by SIRDs and other similar training programmes should also address the use of remote sensing data and GIS techniques in their curriculum. In the districts, capacity building centres may be established or existing centres should be upgraded with the resources like Resource Persons, facility for training development, dissemination of information support service for technology aspects, expertise in social mobilisation, community empowerment and self-management, facilities for convergence and equity issues and provision for cross visits to best practice locations. To overcome the constraint of inadequate capacity particularly at PIA and WC level, a National Committee for Watershed Training has been constituted under the Chairmanship of DG, NIRD. The States/districts may get in touch with DG NIRD, Hyderabad for further guidance in this regard.

### **Watershed Treatment /Development Plan**

39. WDT shall call a meeting of the Watershed Association for preparation of watershed treatment/development plan, on the basis of the information generated from the benchmark survey of the watershed areas & detailed PRA exercise. After general discussion, the WC will prepare an integrated Watershed Development Plan under the guidance of the WDT and submit the same to PIA. The WDT should utilize various thematic maps relating to land and water resources development to prepare the watershed development plans. This watershed Development Plan shall necessarily mention the clear demarcation of the watershed with specific details of survey numbers, ownership details and a map depicting the location of proposed work/activities. The PIA will then formulate a Watershed Development Plan for the area assigned in association with WCs/WAs and submit the same to the ZP/DRDA for approval. This plan shall also be the basis for release of funds, monitoring, review, evaluation etc by the ZP/DRDA, State Government and the Central Govt. Watershed Treatment /Development Plan should be prepared for all the arable and non-arable land including degraded forest lands, government and community lands and private lands. Emphasis should be on low-cost locally available technology, simple and easy to operate and maintain works and activities. The items, inter alia that can be included in the Watershed Development Plan.

- a. Land Development including in-situ soil and moisture conservation measures like contour and graded bunds fortified by plantation, bench terracing in hilly terrain, nursery raising for fodder, timber, fuel wood, horticulture & Non Timber Forest Product Species.
- b. Afforestation including block plantations, agro-forestry and horticultural development. Shelterbelt plantations, sand dune stabilization, etc.
- c. Drainage line treatment with a combination of vegetative and engineering structures.
- d. Development of small water harvesting structures such as low-cost farm ponds, nalla bunds, check-dams and percolation tanks.
- e. Renovation and augmentation of water resources, desiltation of tanks for drinking water/irrigation.
- f. Pasture development either by itself or in conjunction with plantations.
- g. Repair, restoration and up-gradation of existing common property assets and structures in the watershed to obtain optimum & sustained benefits from previous public investments.
- h. Crop demonstrations for popularizing new crops/varieties or innovative management practices
- i. Promotion and propagation of non-conventional energy saving devices and energy conservation measures.

### **Project Approach for Watershed Development**

40. Initial sanction of Watershed Development Project is only indicative of location of watershed Development projects, physical target and financial outlay. The detailed action plan in the form of an integrated project has to be prepared by the WDT in consultation with the Watershed Community. Community Organisation is an important component; at the same time technical requirement and feasibility of appropriate biophysical measures are to be carefully worked out for long-term sustainable interventions for the entire area of the watershed. The action plan should specify among others, the following:

- i. Pre-set deliverable output.
- ii. Elaborate road map with definite milestones
- iii. Definite time frame for each activity

- iv. Technological interventions
- v. Specific success criteria and a
- vi. Clear Exit Protocol

After the detailed action plan is approved by the ZP/DRDA, it would be the responsibility of the PIA to get the same implemented through the Watershed Committees with the active involvement of WDT members.

### **Convergence of various Rural Development Programmes**

41. As the Watershed Development Programme aims at holistic development of people and natural resources, the convergence of all other non-land based programmes of Government of India, particularly those of the Ministry of Rural Development would enhance the ultimate output and lead to sustainable economic development of village community. The DRDA/ZP, therefore, shall take all possible measures to ensure convergence of other programmes of Ministry of Rural Development such as the Jawahar Gram Samridhi Yojana (JGSY), the Swarnjayanti Gram Swarozgar Yojana (SGSY), the Indira Awas Yojana (IAY), the Central Rural Sanitation Programme (CRSP) and the Rural Drinking Water Supply in the villages chosen for the implementation of the Watershed Development Projects. It should also be worthwhile to converge programmes (of similar nature) of the other Ministries e.g. Health & Family Welfare, Education, Social Justice and Empowerment and Agriculture in these villages.

### **Twin track Approach**

42. In watershed development, the general practice is to project long term benefits of the programme in the development plans. Short-term benefits that immediately enthuse the local people to actively participate in the programme and make it a movement are not generally highlighted. It is, therefore, suggested that besides the long term benefits of the programme, the watershed development plan should identify short term benefits with verifiable parameters that are likely to accrue in the watershed project. While approving the detailed action plan, the ZP/ DRDA may ensure that twin track approach has been followed in the preparation of the development plan.

### **Transparency in all aspects of project management**

43. Transparency under the programme would be promoted by various agencies as follows:
- Preparation of Watershed Plan/Action Plan by the WC in consultation with Self-Help Groups/User Groups with the assistance of WDT members.
  - Approval of Watershed Plan/Action Plan at the open meetings of Watershed Association.
  - Display of approved Watershed Plan/Action Plan on a Notice Board at the Watershed Association office, Panchayat Office, Village Community Hall.
  - Review of physical and financial progress of work during implementation phase through periodical meetings of WA.
  - Payment of concerned labourers directly and through cheques, wherever possible.

### **Cost Norms**

44. General cost norms for Watershed Development Projects will be as per Annexure-I. Cost estimates for each work item and project activity shall be worked out as per Standard Schedule of Rates (SSR) approved by the States Governments in representative areas.

#### **Funding Pattern**

45. Depending upon the ecosystem and major problems faced by different districts/blocks, each Watershed Development Project shall be eligible for funds as per the funding pattern prescribed in Annexure – II for the whole project period. Department of Land Resources, Government of India may extend the project period in deserving cases without enhancement of cost and reduction of work components. This amount shall be divided amongst the following project components subject to the percentage ceiling mentioned against each: -

1	Watershed Treatment/Development Works/Activities	80%
2	Watershed Community Organization including entry point activities	5%
3	Training	5%
4	Administrative Overheads	10%
	<b>TOTAL</b>	<b>100%</b>

46. Under the Watershed Development Programme, sizeable amount of funds is made available for capacity building and training. However, it is observed that in several cases, these funds are not being utilized fully. While it should be our endeavour to attach due importance to this crucial activity, it should also be ensured that funds allocated for capacity building and training are spent meaningfully and to the fullest extent.

#### **Credit Facility from Financial Institutions**

47. The general cost norms for watershed development projects shall remain as per Annexure –I. However, the PIA/DRDA/ZP shall explore and encourage availing the credit facility by WA, SHGs, UGs, Panchayats and individuals provided by Lead Banks or other Financial Institutions for further developmental activities in watershed areas.

#### **Revolving Fund for Self-Help Groups**

48. The PIAs will set up a revolving fund of not exceeding Rs. one lakh per watershed to be given as seed money for vocational development by the Self-Help Groups (SHG) at the rate not exceeding Rs.10, 000/- per SHG for undertaking income generating activities. This seed money must be recovered from the SHG members in a maximum of 6 installments on monthly basis. This could be reinvested in the same or other SHGs.

#### **Fund Flow**

49. Funds for the projects from Department of Land Resources shall be as per procedure in vogue at the time of implementation of these Guidelines. However, various installments for ongoing projects shall be as per Annexure-II. Release of next installment will be made when the unutilized balance is not more than 50% of the previous installment released and on receipt of satisfactory progress report and audited statement of accounts of previous year after taking into consideration the interest accrued on the previous releases.

50. Funds from Government of India shall be released to ZP/DRDAs. They may retain their share of the administrative cost from each project and release the funds to PIA for administrative cost, community organization, training and works components. PIA should release the work component to Watershed Committee Account and Secretary Watershed Committee should withdraw the funds and make the payment for the works etc. The Secretary should give detail of expenditure to the Gram Panchayat/Gram Sabha. DRDA should endeavor to release the funds directly to Watershed Committees on recommendations/consultations of PIAs.

### **Opening of Watershed Project Account**

51. The WC will take necessary action to open a bank account in its name in the local branch of any Nationalised Bank/Cooperative Bank. This account shall be operated upon jointly by the Chairman of WC, one member of the WDT & Watershed Secretary. Application to the ZP/DRDA for release of funds to the Watershed Project account shall be jointly signed by the Chairman of WC and the Watershed Secretary and shall be duly recommended by the Project Leader of the WDT. The watershed Secretary shall maintain the necessary records of income and expenditure from this account in the manner prescribed by the ZP/DRDA.

### **Watershed Development Fund**

52. One of the mandatory conditions for selection of villages in watershed development programme is contribution towards watershed development fund as per the activities being undertaken in individual lands as well as community lands. The contributions to WDF shall be at least @ 10% for the works done on individual lands and 5% for the works on Community lands. The Watershed Development Fund shall not be a one time measure but organic in nature. Contribution to this fund will keep on accruing even after the project period is over, by way of the charges paid by the community for use of assets generated in the project e.g. water for irrigation, fuel wood, fodder etc. Contribution to this fund can be in cash or in the form of labour. Care should be taken that the contribution comes from the farmers and not from the labourers engaged to treat the private lands. It is the beneficiaries who should contribute. All such contributions shall be deposited in Watershed Development Fund, which shall be maintained separately, to be operated after the project is completed. In case, no separate institutional arrangement is done by the DRDA for post project management, Chairman, WC and Secretary will operate this account jointly. The individuals as well as charitable institutions should be encouraged to contribute generously in the Watershed Development Fund. The proceeds of this fund shall be utilised in maintenance of assets created on Community land/ for common use after completion of project period. Works taken up for individual benefits shall not be eligible for repair/maintenance out of this fund.

### **Monitoring and Review**

53. The PIA shall submit progress reports on each of the Watershed Development Projects once in every quarter to the ZP/ DRDA. Similarly, each Watershed Committee shall submit a quarterly report to the PIA after it is scrutinized and approved by the WDT. The State Governments shall be responsible for regular monitoring and evaluation of watershed development programmes through independent evaluators The Ministry of Rural



Development may also appoint independent institutions/individuals to carry out concurrent as well as post-project evaluations/impact studies of the Watershed Development Projects.

**54.** The services of identified district-level and State-level Institutes may also be utilized for establishing a partnership relationship with District Authorities/ State Governments. These identified Institutes will assist in generating information/feedback based on 'observations' taken of the projects at prescribed points of time. They will also provide timely and precise inputs regarding the pace and the quality of the implementation of the project, on permanent and dedicated basis. The Institutions are expected to provide the services of personnel trained for performing the expected tasks such as identification of the lead activity in each of the watershed projects, visit the project areas at pre-determined events in the life cycle of the project to obtain readings in the form of pre-set deliverable quantified outputs and assist in ensuring the implementation of the Exit Protocol in the "Watershed plus" phase to ensure adequate attention being paid to considerations of sustainability and equity.

### **Projects on probation**

**55.** Under the Watershed Development Programme a watershed project is taken up for a period of five years, which includes an initial phase of 9-12 months for establishing the necessary institutional mechanism for execution of the project. While this process by and large, has been working satisfactorily, there seems to be instances where the PIA is not in a position to ground the required village level institutions due to conflicting interest groups in the project area. It is, therefore, desirable to put a project on probation for a period of one year. During one year, if it is considered that the project cannot be implemented successfully for certain unavoidable circumstances and reasons, the ZP/DRDA shall recommend for its foreclosure to the State Government which will consider such request on merits and send its recommendations to Department of Land Resources. Before considering any such request, the State Government shall ensure that the amount already spent in the project area has been duly accounted for. The projects will be formally closed only after approval by the Department of Land Resources. In such cases, the unspent amount should be refunded to the Department of Land Resources. This review may take into account the sustainability of the project, equity and other related issues. However, such requests shall not cover the cases of financial embezzlement, defalcation and other deliberate irregularities, for which responsibility is to be fixed.

### **Exit Protocol**

**56.** The ZP/DRDA in consultation with the State Government will evolve proper exit protocol for the watershed development projects. It will endeavor to motivate Panchayats to take over the assets created in the completed watershed development projects for the purpose of operation and maintenance. The watershed projects should generally be managed by the respective Watershed Associations/Watershed Committees under the overall supervisions of the Gram Panchayat after the project period is over and after the external supporting agencies have withdrawn. Mechanism of such Exit Protocol should explicitly form part of the watershed development Plan. The DRDA/ZP should ensure to include the details of the exit protocol in the watershed development plan. A locally acceptable, proper mechanism for utilisation of watershed development funds for post project maintenance & its regular augmentation should be specified. Equity and sustainability of the benefits of the assets created under the watershed development plan should be clearly spelt out by the PIA before it exits from the area.

### **Financial Powers**

57. While most of the works may be actually executed through the user groups, incurring of expenditure shall be authorised to the extent of Rs. 5000 by the Watershed Secretary, up to Rs.20, 000 by the Watershed Committee and above Rs.20, 000 by the Watershed Committee after specific approval of the concerned technical member of the Watershed Development Team. However, withdrawal of funds from the project A/C shall be only through joint signatures as prescribed earlier & the funds will be entrusted with the Watershed Secretary.

### **Liaison with Research/Technical Institutions**

58. Most of the problems identified may have simple, straightforward technical solution within the competence of the WDT members. However, in a few cases, there may be need to understand, validate or improve the local technical knowledge and innovations through more scientific investigation or the problem may be so complex that the local knowledge of farmers/villagers and the WDT members is not adequate to find suitable technological solutions. To meet such exigencies, the State Government should identify some centres of excellence such as State Agriculture Universities (SAUs) / State Institute of Rural Development (SIRDs) /KVKs Training Institutions of Forest/ Agriculture/NGOs etc. The WDT members should get in touch with the concerned institutions for problem redressal, guidance and training needs etc.

### **Queries**

59. Queries may be addressed to the following:-

- a. At the district level: - Chief Executive Zilla Parishad/Project Director, District Rural Development Agency
- b. At the State Level: - Secretary/Commissioner/Director Rural Development.
- c. At the National Level: - Department of Land Resources, Ministry of Rural Development, NBO Buildings, 'G' Wing, Nirman Bhavan, New Delhi - 110011.