

GUIDELINES

WATERSHED DEVELOPMENT PROJECT IN SHIFTING CULTIVATION AREAS (WDPSCA)

Government of India
Ministry of Agriculture
Department of Agriculture & Cooperation
Natural Resource Management Division.

1. Introduction

Shifting Cultivation known as Jhum cultivation in the North Eastern States is a traditional form of crop production, practiced on hill slopes. Shifting Cultivation involves clearance of forest on sloppy land (usually before December), drying and burning the debris (Mid-February to Mid-March before the onset of the monsoon) and cropping. The plot remains fallow and vegetative regeneration takes place till the plot is re used for the same purpose in a cycle. Population pressure compels the shifting cultivators to reduce the earlier fallow period of 20-25 years to 2-5 years in the present days hence reducing the cycle. This form of cultivation is therefore, highly resource depleting and environmentally degrading.

The Scheme of Watershed Development in Shifting Cultivation Areas (WDPSCA) was launched in 1994-95 by the Ministry of Agriculture and Cooperation, Government of India in the seven North Eastern States.

The scheme is aimed at overall development of jhum areas on Watershed basis, reclaiming the land affected by shifting cultivation and socioeconomic up gradation of jhumia families living in these areas so as to encourage them to go in for settled agriculture.

2. Objectives

The broad objectives of the scheme are as follows:

- To protect and develop the hill slopes of jhum areas through different soil and water conservation measures on watershed basis and to reduce further land degradation process.
- To encourage and assist the jhumia families to develop jhum land for productive use with improved cultivation and suitable package of practices leading to settled cultivation practices.
- To improve the socio-economic status of jhumia families through household/land based activities.

- To mitigate the ill effects of shifting cultivation by introducing appropriate land use and water management as per capability and improved technologies.

3. Brief outline of the Scheme

Watershed Development Project in Shifting Cultivation Areas (WDPSCA) of the Ministry of Agriculture and Cooperation, Government of India is a Special Central Assistance to State Plan Programme for the benefit of jhumia families who are living below poverty line. The scheme will be implemented on watershed basis with a cost norm of Rs. 10,000/- per Ha on net treatable area. The financing of the scheme includes treatment of arable and non-arable land, drainage line, creation of water bodies development of agriculture/horticulture/plantation crops! forestry and land based household production system as-package of rehabilitation component. As a whole the focus is on natural resource management, economic enhancement, leading to poverty alleviation and eco friendly living.

The implementation of the scheme will be carried out in the organizational and committee set up of:

- National watershed committee chaired by Secretary, Department of Agriculture & Cooperation.
- National Coordination by Natural Resource Management Division, Department of Agriculture & Cooperation.
- State Level Watershed Steering Committee (SLSC), chaired by Chief Secretary State Nodal Department appointed by SLSC
- District Watershed Development Committee (DWDC), notified by SLSC Project Implementing Agency and WDT appointed by DWDC
- Watershed Association (W A), Watershed Committee (WC) accepted by DWDC.
- Self Help Groups (SHG), User Groups (UG) and Beneficiaries of the WA guided by PIA - WDT of the Mini-micro watershed.

The WDPSCA will be initiated with pre-project activities, orientation and training, community organization and PRA, planning followed by implementation with end results and

success criteria, monitoring and evaluation (both internal and external) and post project activities.

4. Physical and social criteria for eligibility of watershed. The selection of Watersheds may be done in an objective manner by using a combination of scientific parameters for the micro-watersheds and mini-Micro-watersheds and also the following physical and social parameters:

- A minimum of 25% of the Watershed area is under Shifting Cultivation.
- 50% and above families are engaged in shifting cultivation as the only means of livelihood and are living below poverty line.
- Willingness of jhumias to go for improvement of jhum land with alternate farming system leading to permanent agriculture practices.
- High level of seasonal migration of Resource Poor Families to urban areas.
- Good scope of integrated development and demonstrative effect (as reflected in availability of common land / forest land, private fallow land, sufficient quantity of surplus runoff going outside the watershed area etc).

5. Resolution from the village panchayat / Village Council / Village Dev. Board for participation in watershed programme: Gram Panchayats / Village Councils / Village Authority/Village Dev. Boards belonging to the prioritized watershed villages may apply for selection of watershed project under their jurisdiction to the District Nodal Officer along with a resolution on the following aspects:

- Willingness to manage watershed programme through a separate W A/WC after its registration under the society registration act.
- It should be ensured that each one of the jhumia families will have a minimum of 1.5 ha land under ownership/provided for in the watershed.
- Willingness to take-up 1/3rd jhum area under plantation.
- Willingness to implement the project by villagers themselves.
- Willingness to pay contribution for individual as well as community works.

- Willingness to operate revolving fund for improving farm production system and livelihood support system through organized *UG/SHG*.
- Willingness to maintain community structures to be created under the project.
- Willingness to contribute *shram dan* for implementation of entry point activities as well as development of common land resources. –
- Willingness to cooperate with PIA/WDT for organizing the community into SHG, UG, WA, we and for carrying out PRA exercises for preparation of watershed plan and implementation.

6. Demarcation of watershed boundaries at the field level: Once the village is selected, the boundary of the watershed may be demarcated along with the village Authority and farmers. Afterwards the list of farmers whose lands are covered under the mini-micro watershed may be prepared with the help of records available at the village level. This shall facilitate proper participation of the farmers as they themselves have identified the watershed boundary.

7. Selection of PIA: The success of the watershed programme will depend upon the selection of suitable PIA as well as a responsive community. The selection of PIA would be carried out through a process and the potential PIAs would be required to prepare project reports / feasibility studies of identified watersheds. The project reports / feasibility studies would also include assessment of the responsiveness of the community. The project reports and the PIAs would be assessed / evaluated for their strength based on fixed criteria and the final selection would be made by the District Watershed Development Committee (DWDC). The following criteria may be considered while selecting a PIA: a minimum of 4-5 years field experience in participatory management of natural resources; ability to motivate community members/ beneficiaries to adopt participatory watershed management, and *shramdan* by the beneficiaries for resource building at the common property land, experience in organization of Self Help Groups through credit and thrift activity; sensitivity towards group action, conflict resolution and equity for poor and women, willingness to identify full time WDT members for the project with head quarters at the project area; willingness to provide additional facilities to the WDT over and above the provision under the project particularly towards transport,

maintenance of accounts, use of computer facilities etc.

Under the present programme different types of organizations (including government, non-government, Panchayat Raj, District Councils, Rubber Board, Tea Board, Coffee Board, research and training institutions, autonomous organizations created under NATP namely SAMETI, ATMA etc.) are eligible to become PIAs.

The eligible~ PIAs may apply giving all relevant information to satisfy the conditions laid down in the selection criteria. They may either indicate their preferences of the villages where they would like to work or leave the final decision to the District Watershed Development Committee (DWDC) to allocate selected villages.

On receipt of these applications from the Villages and the PIAs, the DWDC will scrutinize the eligibility of the PIAs and the villages. The DWDC shall link the PIAs and the villages giving due weightage to factors such as proximity, contiguity, previous linkages and preferences given by the PIAs and the villages. For a village where no PIA 'is coming forward for taking up the Project, the DWDC may constitute a Project Implementation Committee drawn from various related departments and agencies and it will function as a PIA. The DWDC shall have the authority to cancel or modify these orders in the light of any changed circumstances.

8. Deployment of WDTs: On receipt of approval of its nomination, the PIA shall take immediate steps for the appointment of a project leader and other members of Watershed Development Team (WDT). Each PIA shall be eligible to engage four persons to work on a full time basis as Watershed Development Team (WDT). The members of the WDT should be at least graduates in subject disciplines of relevance to the watershed e.g. civil, agricultural engineering, agriculture, forestry, animal science, social science or related basic sciences, etc. However, one-woman member in the WDT is preferred. Retired government officials with requisite experience in the area may also be considered.

9. Project Commencement date: A date of 3 months from the date of nomination of PIA shall be deemed to be the date of commencement of the Watershed project for the selected villages attached to PIA. The PIA and WDT will be eligible to draw the first installment of management component fund under the project. The duration of the project will be 5 years.

10. CAPACITY BUILDING

Orientation and Capacity Building: WDPSCA being an innovative programme insists on capacity building at all management levels from the planning stage of the scheme itself. A major orientation in the tools and techniques of participatory approaches and capacity building programme is suggested as mandatory. For this purpose the following specific steps are being proposed:

1. Orientation of members of various management committees and institutional heads.
2. Training of state level trainers drawn from various organizations.
3. Training of faculty members of autonomous support organizations.
4. Training of Project Implementation Agency- Watershed Development Team identified for each cluster of 2-10 mini-micro-watersheds
5. Training of office bearers of Watershed Association, Watershed Committee, User Groups, Self Help Groups etc.
- 6.

11. Training of Personnel and training institutions : Orientation / training of members of various Management committees and Institutional heads, state level trainers etc may be undertaken by national institutions such as NIRD,NERIWALM, etc. Subsequently state level trainers may build capacities of faculty members of autonomous support agencies. These agencies in turn would train PIA / WDT. Responsibility of training office bearers of Watershed Committees, Watershed Association, User Groups, Self Help Groups would rest with Project Implementing Agency/ Watershed Development Team.

12. Community Organisation :

Mobilization of Community and Awareness building: Before commencing the developmental activities of the programme, sufficient attention should be paid towards generating awareness among the community. For this purpose repeated meetings in large and small groups may be arranged. Such an approach may help in building awareness among the resource poor families particularly the women.

13. Entry Point Activities: The primary purpose of Entry Point Activities (EPA) is to meet a part of the felt needs of the community, develop rapport with people and to build the capacity of W A, we, SHG and UG to plan and implement a programme through participatory approach. The EP A may be such that the concerned members of the community are willing to carry out shram dan (for at least 2 days per activity) or in kind. Village road to the watershed or renovation of existing roads from village to the watershed or renovation of existing rural infrastructures or any other specific immediate need of the community may be the EPA activity.

14. Identification of Village level community organizers & volunteers: During the course of various meetings with community members, the WDT members may identify village based social workers / motivators who can be involved in organizing the community. 2-3 volunteers will also be selected to work for the project specially to assist the Watershed Secretary of the project. The volunteers are expected to initiate; implementation of works besides assisting the secretary in various responsibilities. Wherever possible the youth clubs, mahila mandals, anganwadi members may also be involved in this process. A small honorarium may be paid to the community organizers.

15. Organization of groups: As envisaged under the project, four types of groups are to be organized at the village level namely: Self Help Group (SHG), User Group (UG), Watershed Association (W A) and Watershed Committee (WC). In order to minimize conflict among the community members, it is essential to form them at the end after organizing the first 3 groups. Till the WC is organized (and its office bearers like Secretary and volunteers are identified) the WDT may take the assistance of village level community organizers not only for organization of SHG and DG but also to facilitate PRA exercises for preparation of perspective / detailed plan of the watershed.

16. Organization of Self Help Groups: Self Help Group (SHG) or groups shall include those members who are landless or those who are having marginal size of land holding. These

members may be motivated to get organized into small homogenous groups (preferably with 15-20 members in each case) based upon their livelihood, social affinity, compatibility etc. The primary purpose of organizing these groups is' not only to involve them for implementation of a particular type of activity/livelihood under the watershed project but also to strengthen them as a functional unit so that they might take their own need based activities.

The Self Help Groups may be organized with the help of village level community organizers who are to be thoroughly trained about the concept of SHG, management of credit and thrift activity, group dynamics and maintenance of records through focused exposure visits to successful examples as well as through skill oriented training programmes.

The group can be considered mature when it meets regularly, the attendance is above 75 percent; proceedings of the meeting are maintained properly, records about credit and thrift activity are maintained properly, recovery of loan is above 90 percent etc. At that stage, the support for the community organizers may be withdrawn from the project.

17. Organization of User Groups: Broadly speaking user groups shall be the shifting cultivators at the time of the initiation of the project. These members may be motivated for getting organized into small homogenous groups. Like SHG, the UG may also be organized around credit and thrift activity with the help of locally available trained community organizers. These groups may be of women members or men members or both depending upon their availability, willingness etc. Experience has shown that it may be better to organize VG also as per their social affinity and compatibility even if they are to manage a particular community asset. Such members learn the value of group work and would be able to manage the community structures through occasional meetings of concerned members as and when the need arises.

18. Constitution of Watershed Association (WA): After the organization of SHGs/UGs, the WDT shall call for a General Body. Meeting of all Members of the above groups, village authority/ council dev. board. This body would be known as Watershed Association (WA), which would be registered under the Societies Registration Act. The WA shall evolve its own working procedures and will meet preferably once in a month, to discharge the functions entrusted to it as per the guidelines.

19. Constitution of Watershed Committee (WC): The WA shall nominate four representatives from the Self Help Groups and five from the User Groups as members of the Watershed Committee each representative from the Gram Panchayat / Village council/village authority/village development board and the WDT. The W A will decide on its own procedures for nomination of the members of the WC by rotation, which shall be simple and easy. The president of WA may also serve as chairperson of the WC. The WC shall perform all the functions that are entrusted to it in the guidelines for which it will work out its own procedures in consultation with the WDT.

The WDT will provide suggestions and assist the W A/WC to elect and appoint a Watershed Secretary as per the provisions of the Watershed Association, which is a registered society. The secretary is primarily responsible for maintaining records related to physical and financial progress, disbursement of wages to the laborer, purchase of material; supervision of the work of volunteers; maintaining the measurement book etc.

The experience has shown that functioning of WC and W A improves significantly if its members belong to mature VG and SHG. Hence it is important to delay the formation of WC/W A until the UGs/SHGs are properly organized. It may be appropriate if membership of W A is given to all those persons who are direct participants in the watershed programme so that decision-making process is influenced by these members. This may include members of UG and SHG and other landowners whose land is covered under the identified watershed. It may be desirable if a nominal annual membership fee is charged from the WA member so that their involvement becomes active.

20. Constitution of District Watershed Development Committee (DWDC): The Chairman State level steering committee on watershed may issue a circular for the setting up of District Watershed Development Committee (DWDC). The Committee may be chaired by Deputy Commissioner/District Collector and the secretary would be the District Officer of the State Nodal Department. The committee may meet monthly or quarterly. The other members appointed would be drawn from concerned district line departments, District Councils etc. The committee would review the progress of the watershed project, assist in resolving management

and administrative problems, provide guidance in the project implementation, identify policy issues, if any, for reference to state and national committees. The DWDC will scrutinize all decisions taken by the Nodal officer in respect of selection of watersheds, watershed villages, appointment of PIAs, programmed proposals, approval and disbursement of funds to the concerned etc. The decisions, approvals etc from the State Nodal Department, and SLSC will be accepted by the DWDC.

21.State Level Steering Committee: This Committee may be chaired by Chief Secretary or any senior officer nominated by the Chief Secretary among the Agriculture Production Commissioner/Development Commissioner/ Development Commissioner (Hill Areas). The members of the committee (Appendix-V) may be drawn from concerned line department of the state govt. including rural development and panchayat raj department; Tribal Development, District Council, representative from SAD/ICAR institution in the state, representative of NEC representatives of selected autonomous support organizations, state level training organization. The steering committee will nominate the Nodal Department in the State and may meet once in six months to sanction the projects, review progress, resolve management issues and issue policy directions.

22.National Watershed Committee: This Committee may be chaired by Secretary (A&C) and have its members drawn from various organizations including ICAR, Departments of Animal Husbandry & Dairying, Planning Commission, Ministry of Environment and Forest, Ministry of Rural Areas and Employment and Experts in the field. This Committee may meet once in a year for reviewing the progress and provide policy direction to the programme.

23.Training of Watershed Secretary, Volunteers and Members of WC: Watershed Secretary, Volunteers and the members of we will be oriented by the WDT about participatory planning process followed so far for preparation of detailed action plan and their role in consolidation of these proposals into a comprehensive watershed development plan for approval by W A and the district head. After that they shall be trained thoroughly in administrative procedures, record-keeping, accounts-keeping, conduct of meetings, execution of

engineering works, maintenance of measurement books accounting procedures etc. to enable them to discharge their responsibilities effectively during the implementation phase.

24.Planning

Participatory Rural Appraisal Exercises: After the training programme to WDT members, they may conduct a series of Participatory Rural Appraisal Exercises separately in each of the selected villages. These exercises may then be used for analyzing problems, reasons for the problems and possible solutions as understood by the participants. The output from such an analysis would provide a basis for external resource persons (including WDT and others) to build upon it through either value addition to their solutions or by providing alternate options to address the problem. It is however important that the concepts of sustainability, equity, eco-friendliness etc are also kept in view while making the final choice of options for implementation.

Gathering and documenting information is only one of the objectives of the PRA exercises. It is however, noted that equally important objective is to interact with the village community in small groups to facilitate their participation and full involvement in the programme.

25.Basic Survey: The information collected from villagers in the initial PRA exercises should be verified with secondary data available in the government departments, meteorological department, revenue records, village survey reports, etc. The above information could be further supplemented with the detailed survey to be conducted with the following objectives.

- to assess the extent of area affected by shifting cultivation and evaluate the suitability of the land for settled cultivation and allotting to the beneficiaries.
- to collect physical data for determining the treatment measures
- to identify the biological resources and capabilities with a view to determining the specific thrust areas.
- to identify critical factors contributing to the practice of Jhum and degradation in the project areas.
- problems affecting productivity of crops.

- to identify cost effective treatment for prevention of soil loss and improvement of moisture regime.
- social behavior and customs of the local population
- Local preferences of the people in adoption to trees, grasses, shrubs.and fodder
- to identify linkages, infrastructural and institutional arrangements to promote socio-economic development.

The detailed survey must lead to the preparation of a Land Capability Map (LCM). The survey must collect data on rainfall of (nearest Block HQ) its distribution and intensity, ground water potential and run-off behavior soil erosion, etc. Available data with the ICAR regional stations should also be used for this purpose. Survey of water resources potential and areas which could be irrigated should be assessed.

An inventory of physical resources should be made to identify the grass, shrubs and tree species thriving in the area and of use to the local people. This inventory will also identify tree (plantation and horticulture), fodder and grass species, which can be introduced in the area with reasonable success for promoting settlement of Jhumia families.

A detailed survey for establishing benchmarks on the following parameters shall also be made

- the number of persons engaged in shifting cultivation and their land holding.
- the main crops grown
- the number of persons employed on non-farm activities and subsidiary occupation, and land less families and their livelihood means,
- the economic status of the Jhumia family.

26.Liaison with Research/Technical Institutions : In a few cases, there may be a need to understand, validate or improve the indigenous 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. In such cases the WDT members should get in touch with the concerned technical departments of government or research institutions and liaison with them to find answers to their problems.

27. Research Input in Watershed Development: A mini-watershed where new technologies can be developed, tested and demonstrated by the research organization may develop into a model watershed, which could be replicated elsewhere. The research proposals from eligible/ competent R&D Institutions will be approved by the DWDC as PIA, or can be associated with some PIAs in one of the watersheds with mutual understanding among themselves.

28. Allocation or Watershed Budget: For a unit watershed of treatable area 500 ha. the budget provision of Rs. 50.00 lakh is provided in the overall budget cost. A broad allocation of funds for major components is given below:

Sl no	Components	Allocation of funds (%)
I	Management Component	Upto 22.5
	1. Administration Cost	Upto 10
	2. Community Organisation	Upto 7.5
	3. Training Programme	Upto 5
II	Development Component	
	1. Natural Resource Management	50 – 70
	2. Rehabilitation Component	15 – 20
	TOTAL	100

29. Project Formulation: On the basis of PRA exercises and available data generated through basic survey, a watershed development / treatment plan should be developed for all arable lands and non-arable lands. Emphasis should be on low cost simple and easy to operate and maintain works and activities.

The developmental programme for each village will be formulated after detailed discussion with the beneficiaries explaining to them the economics of the settled farming systems. The models developed by ICAR Centers and Research Complex, Shillong and other successful models for rehabilitation of Jhum areas in the NE States may be taken for guidance.

Technology Management Aspects for Development of Resources: Technologies under watershed development programme can broadly be classified into two types:

- For development of natural resources - conservation and up gradation

technologies; and

- For enhancement of production and productivity of different commodities and combination of commodities - Crop demonstration and land based household production system through rehabilitation activities.

30. Conservation Technologies: These technologies will vary from location to location. Such technologies should be in consonance with indigenous land use practices and systems.

A. Arable:

- Insitu soil and water conservation measures like Contour bunds, contour trenches, vegetative contour barriers, and half moon terraces.
- Crop demonstrations for popularizing new crops/ varieties or innovative management practices.
- Water harvesting structure through small embankments/farm ponds for erosion control.
- Repair, restoration and up gradation of existing common property assets and structures in the watershed.
- Combination of vegetative and small engineering structures like checking bunds/plugs along the drainage line.
- Horticultural development.

B. Non-arable land:

- Afforestation, grassland development agro forestry horticulture, fuel and fodder plantation, timber and fruit trees and tree species of medicinal value.
- Engineering/vegetative measures like contour/graded bunds vegetative contour barrier, contour/staggered trenches, check bunds, brush wood dams, vegetative filter strips, vegetative waterways, etc.
- Water harvesting structure through small embankments / farmponds for erosion control.

- Repair, restoration and upgradation of existing common property assets and structures.
- Nursery raising for fodder fuel wood, timber and horticultural species.

C. Drainage line treatment:

- Gully plugging, Stone check dams earthen dams, drop structures, bank stabilization, and brushwood check dams, grassed waterways. Water harvesting structures through small embankments, farm ponds.

Engineering structures: Engineering structures should not be constructed in the first year of the project. Wherever engineering structure is to be constructed, they will be taken up in the second or third year of the implementation of the programme as per proper sanction for the specific structure. This is to ensure that vegetative soil conservation measures initiated in the first year, acquire some definite shape before supplemental engineering structures are put up on the second or third year. Thus, every proposal for an engineering structure would have to be prefaced by a description and site plan of the vegetative. Soil conservation measures that were implemented in the previous year of the project. Evidently, high priority should be given to vegetative measures over engineering measures.

31. Measures for improving biological resource endowment: This would improve afforestation, promotion of agro-forestry, establishment of composite nurseries (kisan and departmental), pasture development and fodder development.

32. Afforestation: In taking up afforestation of forest and non-arable lands only live hedges will be used for the purpose of demarcating the boundary of land and the planted area. Under no circumstances, wire fencing should be done. As far as possible, bio-diversity must be the corner stone of the plantation programme. Fast growing Tree species, which have multiple uses like, fuel and fodder, should be taken up for plantation, to promote land cover from the earliest

possible point of time.

Afforestation programme must be taken up with the full involvement of the local community so that biotic interference through grazing is eliminated, it will be necessary to discuss with the local community at various stages about the measures to meet their fodder needs and secure their commitment to the protection of the planted area.

33. Rehabilitation activities: Depending on the local culture, choice' and requirement of the beneficiaries following land based/ house hold activities can be taken up to supplement their requirement during the lean period of plantation programme to encourage permanent settlement. A '**Beneficiary Card**' will be maintained for this specific programme. Suitable activities depending upon the local situation can be adopted with the approval of DWDC/WDT.

- A. Production of short duration crops like banana, papaya etc.
- B. Animal Husbandry
- C. Pisciculture
- D. Sericulture
- E. House hold activities

Identification of family under the rehabilitation component would be made through Watershed Association with the help of DO & SHO taking care of the individual requirements and availability of funds.

34. Convergence of On-going Government Production Programmes in Watershed:

Advantage must be taken of the regular on-going production programmes of the line departments Agriculture, Horticulture, Animal Husbandry, Fisheries Sericulture, Forest as well as rural development programmes of the DRDAs/ ZPs to bring about requisite convergence. The District Watershed Development Committee which comprises representatives from line departments and where the watershed plans would be coordinated and reviewed would be the appropriate forum wherein dovetailing with on-going programmes would be achieved.

35. Cost Norms for Structures: Keeping in view high variability in labour cost from place to place there will be flexibility in cost norms for each structure regarding natural resources development. The cost estimates would be worked out as per latest Standard Schedule of Rates (SSR) in the respective areas. For large water-harvesting structures, which require higher financial investment, the State Watershed Committee may set an upper cost ceiling. If however, a watershed community desires to exceed the ceiling fixed by the aforesaid committee they may do so by making a community contribution in excess of the limit fixed.

Under the participatory approach it is essential to decentralize not only preparation of design and estimate but also the technical sanction of these structures. The small structures costing less than Rs.25, 000 per unit may be technically sanctioned by the concerned WDT. However big structures costing more than Rs.25, 000 shall require technical sanction by experienced and qualified engineers/professionals out of a panel of experts nominated by the DWDC. The administrative approval for such works would be given by DWDC.

36. Initial Approval of Watershed Development Plan by WA: The work plans of each user / user group will be submitted to the WC which will then consolidate it into an integrated Watershed Development Plan in consultation with the Watershed Development Team and present the same to the WA for its approval.

The Watershed Development Plan should also include the objectives, expected results and success criteria. It should also identify the mechanisms that would be used by the Watershed Development Committee and the Project Implementation Agency to monitor and review the progress being achieved from time to time during its implementation.

37. Final Approval of Watershed Development Plan by DWDC: The W A shall submit the Plan, with the recommendations of the PIA to the DWDC, which shall convey administrative and financial approval. The approved Watershed Development Plan shall become the basis for the DWDC to release the funds and also to monitor, review and evaluate the project.

38.Implementation

Opening of watershed project account: On constitution of the WC and the appointment of the Watershed Secretary as well as Watershed volunteers, the WC will take necessary action to open a bank account in the name of W A in the local branch of any Nationalized Bank/Cooperative Bank. This account shall be operated jointly by the Chairperson of WC, a member of the WDT and the Watershed Secretary. Withdrawals of amount upto 1,000/- shall be made on the joint signatures of the Chairperson of the WC and WS. For amounts above 1,000/- one member of the WDT, Chairperson of WC and WS shall be the signatories. Application to the district head of nodal agency for release of funds to the Watershed Project Account shall be jointly signed by the Chairperson of WC and the Watershed Secretary and shall be duly recommended by the project leader of the WDT. Before effecting any withdrawal of funds the records pertaining to the work done/executed will be substantiated with measurement book, approval of the WC/WDT are to be endorsed. The Watershed Secretary shall maintain the necessary records of receipt and expenditure under this account in the manner in which the district heads shall prescribe.

39.Setting up of Watershed Development (Corpus) Fund and maintenanece of

assets: The WC shall open another account in the local branch of the bank in the name of "Watershed Development (Corpus) Fund". This shall be a fixed deposit/interest bearing account and shall be operated jointly by the President of the Watershed Association, and the Project Leader of the WDT. Contributions received from user group members and individual beneficiaries in cash or the monetary equivalent of materials (taken from the Watershed Project A/c) shall be transferred to the Watershed Development Fund. Any other cash collections made by the Watershed Association/WC in terms of donations/contributions, recoveries of fines or fees for services rendered, etc. shall also be deposited in the Watershed Development (Corpus) Fund. Besides this 1.0 percent of the project cost shall be transferred by the DWDC to the above account as a corpus fund under this scheme provided an equivalent share is contributed by the State govt. and the beneficiaries to this revolving fund. The revolving fund will be utilized for repair and maintenance of watershed assets created under the programme and to facilitate the

marketing activities with a specific institutional framework to attain the task.

40. Opening of accounts for rehabilitation fund: A separate account will be maintained for rehabilitation component of this scheme. After approval of the project, the WC as per the estimate of the individual rehabilitation activities will procure the items and provide to the concerned beneficiaries on one time basis or installment basis depending on the type of activity. In case of bigger units for individuals or groups to utilize the assistance as margin money, the amount has to be deposited in the Bank Account. All transactions would as far as possible be made through bank for effective functioning of the programme. The assistance can be utilized in the following manner:

- The fund deposited in the bank can be utilized by individual either on installment or one time basis.
- Fund can be utilized by the individual as margin money for getting loan for bigger units.
- Fund can be utilized in group approach with higher investment for a bigger unit on community basis
- Fund can be utilised by cluster of families for obtaining higher amount of loan from the bank as against the margin money for establishing need base larger unit on community basis.

41. Financial Powers: While most of the works may be actually executed through the user groups, incurring of expenditure shall be authorized to the extent of Rs.1,000 by the Chairperson Watershed Committee and above Rs.1,000 jointly by the Chairperson Watershed Committee and the concerned technical member of the Watershed Development Team. For all the land-based activities, proper measurement book will be maintained at WC, which will be countersigned by the member WDT after field verification of the works executed by the beneficiaries. All fund release by means of Bank cheque may be discussed at the WA/WC and approval may be sought for such withdrawals. The proceedings of the W A/WC is mandatory for the Technical Officer to sign the cheques for money withdrawal.

The district heads shall lay down certain cost-norms regarding T AIDA to farmers, honorarium to guest faculty and other incidental expenditures to be incurred under community

organization, training programme etc.

42. Participatory Management of Implementation Phase by WC: After receiving the funds from district head the WC shall start assuming primary responsibility for implementation of various works. There are five important aspects which require special attention during implementation phase: (1) maintenance of records and accounts, (2) collection of contribution, (3) social auditing and transparency, (4) facilitation of group action/conflict resolution and (5) empowerment of community.

43. Maintenance of Records and Accounts: 11 types of records and accounts are required to be maintained at the WC level and 3 types of records are to be maintained at PIA / WDT level. These records shall provide the basis for preparing various progress reports, demand for release of funds, and auditing of accounts. Annual auditing of accounts of W A will be required under societies registration act. The District Nodal Officer who is the Secretary of DWDC may announce a panel of chartered accountants. The president W A is to send the audited utilization statement every year to the district nodal officer.

44. Contribution from the community: Collection of contribution from actual users is very essential for promoting genuine participation of people into the programme. It empowers the users to demand need-based technology; creates a higher sense of accountability among outsiders; provides financial resource for post-project maintenance; etc. A portion of this fund can be used as revolving fund through matured UG — SHG for post project activities and the balance can be transferred to the corpus fund account of W A for project maintenance and facilitation of marketing.

The following two options may be considered for promoting the contributory approach for works which are implemented in common land: (1) collection of contribution as shramdan for about two days per month from all participating families under the watershed programme and (2) allocation of usufruct right in advance to families and restricting the contribution from the concerned families only. These usufruct rights may preferably be given to different SHGs for certain portion of common land (5-10 ha per group) or for certain type of new products (eg.

Minor Forest Produce, fuel trees, bamboo etc.) which are likely to develop on account of proposed investment in the common land.

45. Social Auditing and Transparency; Social auditing and transparency at the village level is perhaps the most important mechanism to minimize conflicts among community members. It also helps in empowering majority of members in the community rather than a few influential people; empowering outsiders (as well) but in the long run; improving participation of resource-poor families in the programme. The following steps may be taken for facilitating transparency in the programme: painting wall posters on important aspects like perspective plan, key features of the scheme, SSR etc.; organizing many rounds of open meetings with the community preparing technical estimates for each work in consultation with concerned users; ensuring collection of contribution from concerned users before starting implementation of work (except in cases where user is to contribute as labour); making full payment to labour as per SSR; organizing frequent meetings of WA to review physical and financial progress during implementation phase.

46. Empowerment of Community; One of the important purposes behind the participatory approach is to empower the watershed community so that they could initiate activities on their own and also take optimum advantage of other ongoing developmental programmes. For this purpose an appropriate withdrawal strategy should be adopted by WDT from the beginning itself in order to provide the community with sufficient opportunity to become self reliant in a gradual manner.

47. Modality for Payment of Works by WC; Implementation of works should be started only when the particular user / user group is willing to come forward. The user group may have the freedom to identify skillful labour for carrying out the required job in their own fields. The payment should however be made by the watershed secretary directly to the labour through cash (if amount is less) or through cheques. This should however be done after receiving a certificate from the concerned user(s) about satisfactory completion of the job.

48. Management Flexibility during Implementation Phase: Completion of the works as per target may not take place in some cases. It is therefore essential to introduce certain flexibility in overall management of the programme. The following specific provisions may be considered in order to promote the desired flexibility.

During implementation phase different watersheds show differential rate of progress which may be due to differences in their maturity and response to the participatory approach. Certain degree of differences in progress would not matter as it can be made up subsequently. However if in some watersheds the overall progress is too slow and if the funds are likely to be under utilized, it would be advisable to shift the funds to adjoining watersheds preferably under the same PIA rather than attempting to achieve financial targets in the existing watersheds without observing the contributory norms, transparency etc. Such an arrangement would itself bring seriousness among the Watershed Committee member and the need for shifting the 'budget may be minimized particularly if the assessment of progress is properly monitored on regular basis.

There is a tendency to prepare detailed plans of the watershed for the entire area and also for all the proposed components in order to achieve an integrated development. It is observed that the available funds are usually inadequate to meet the requirement of the entire watershed area. On the other hand it is also observed that some of the families are not keen to participate in the programme particularly if contribution is to be paid by them. There is hence a need to modify the approach and make the programme demand driven in which implementation would be carried out in only those fields where farmer(s) are keen to pay the required contribution. With this approach, certain families who are not able to come forward as per the financial norms (i.e. contribution, revolving fund etc.) may not be included in the programme. These families however have a right to join later on as and when they get motivated.

49. Mechanism for facilitation of accountability: For smooth operation of funds at the village level, it is essential to evolve a proper mechanism for its accountability. For this purpose the following specific steps may be considered: (1) developing a MOU between DWDC, Watershed Association and Project Implementing Agency regarding

their roles and responsibilities and accountability; empowering the district nodal agency to carryout surprise check of any work; opening a vigilance cell/desk in the office of the district nodal agency to entertain any complaint regarding misuse of fund released to W A or PIA; empowerment of the District Nodal Agency to blacklist the defaulting PIA/Watershed; discontinue the programme temporarily or to take any other legal action in case the matter is not getting resolved.

50. Post Project Activities

Convergence of Activities of Different Departments / Agencies: Measured SHG, UG Groups under the watershed programme may be utilized for convergence of individual oriented as well as community oriented schemes available with the department.

Post-Project Expenditure of left over amount: - The funds can' be used for development works. However, they shall not be used for administrative aspects beyond the closing date of the project, unless there is a saving under the management component.

Post Project Maintenance of Community Structures: The primary responsibility for repair and maintenance of community structures may be assumed by the concerned user groups. For this purpose the ownership of the structures may be formally transferred in the name of these, groups. In case of bigger structures which may involve a large number of users the responsibility may be assumed either by WA or by panchayat (in case UG members are unable to manage the requirement). The responsibilities for maintenance shall however be owned by the concerned users as per the modalities worked out by the group. Wherever needed the amount collected under Watershed Development (corpus) Fund may be taken as a revolving loan by the groups to meet the requirement.

Sustainable Utilization of Watershed Development (Corpus) Fund: Sustainability of this fund is very crucial for continuity of various community activities during the post project period. Hence in principle this amount may be given as a loan to the mature SHG and UG to meet their community oriented needs namely repair and maintenance of community structures, procurement of inputs on a community basis, storage and marketing of produce at a common place etc. The amount should be provided only to those groups, which are already having a matching common fund and have a past record of managing their credit and thrift activity in a

successful manner. The operation of this fund may be carried out by WC, which may continue to function beyond the project period. If needed the fund may be used for paying a small honorarium to a local person for assisting in maintaining the accounts.

This fund shall be operated by a management committee consisting of representatives from mature SHG/UG. If needed utilization of this fund can be started during last year of the project so that members get used to the procedures in a proper manner. During this period the WDT may provide necessary facilitation.

Linkages with Credit Institutions: During the Project lifetime the PIA and WDT will work to develop linkages with the credit institutions such as the Regional Rural Banks, Cooperative Banks etc. Credit would flow to constituents of the watershed through (i) credit for production activities as reflected in the Watershed Plan such as short-term crop loans, medium term loans for Livelihood Systems such as dairy animals, etc. (ii) credit support to Self Help Groups (Hi) Watershed Development Fund at NABARD.

51. Monitoring & evaluation

Application of Information Technology in Watershed Programme: At present GIS based software / application programmes are now available which can improve the efficiency of planning, implementation, documentation, reporting of watershed progress.

Internal as well as External Auditing of Accounts on Regular Basis: A major part of the fund is going to be in the hands of a new community based organization which may not have previous experience in handling such a large amount of funds. Besides training of its committee members on account keeping, there is a need to carry out internal auditing (once in three months) and external auditing (once in a year) so that maintenance of accounts could be done in a proper manner. Annual auditing of above accounts will be required under Societies Registration Act. For this purpose DWDC may identify a panel of auditors out of which the WA/PIA may choose anyone upon the availability and convenience. This is besides the mandatory annual AG audit of funds released to the District Nodal Department/DWDC. Accounts at both these places will have to be maintained keeping requirement of above audits in view. There is a need to orient watershed committee members that responsibility for addressing the audit paras lies with

them. Discussion on the audit paras and follow up action should be worked out in the open meetings of WA. Social auditing through transparency at every stage is also a crucial requirement for proper financial management. Hence all development transactions may be approved preferably on monthly basis by the watershed association.

Evaluation and Process Documentation: - The Ministry of Agriculture and the State Governments may appoint internal as well as external agencies to carry out concurrent as well as post-project evaluations of the Watershed Programme. At the same time, independent consultants may be asked to undertake action research projects to document the actual process of project implementation in a representative sample of watersheds to analyze and assess the implementation processes. The results of these evaluations and process documentations may be submitted to the State and Central Level Implementation and Review Committees with suggestions on policy issues as well as improvement of working procedures.

The Project Implementing Agency may review the progress of each watershed before participating in the district meeting. In this meeting 3-4 representative of each watershed committee may participate (chairperson, secretary, volunteers etc). Watershed association may then undertake monthly meetings to review the progress. This approach would help in achieving a steady progress and also timely resolution of any conflict in implementation.

While the detailed monitoring of the progress of the projects could be done through the quarterly progress reports, the main purpose of the monthly review meetings will be to get a summarized information about physical and financial progress, and to discuss and analyze the overall performance including the reasons for success and difficulties in the implementation of the projects with a view to replicate successes and overcome barriers to effective implementation. After internal discussions the progress report for each quarter and on annual basis be furnished to the State Nodal Department along with maps depicting the carried activities, which will be then sent to NRM Division of Ministry of Agriculture for monitoring the progress.

Maintenance of Records and Supervision of Quality of Work Done by WC: Each Self Help Group/User Group shall maintain its own accounts for the works/activities undertaken by it. The watershed volunteers shall be made responsible for proper maintenance of above records, accounts and also periodic measurements of the works done. The watershed secretary

shall verify the correctness of the accounts and place before the Watershed Committee for approval of expenditure. Members of the WC, Watershed Secretary shall be responsible along with actual users for maintaining good quality of the works.

The Watershed Development Team and the watershed Committee shall ensure that accounts of their activities and expenditures are maintained in accordance with the formats prescribed by the district head who in turn may take the advice of the District Watershed Development Committee for designing them in accordance with the state level reporting formats for review and monitoring of progress. Each Watershed Development Team should maintain proper documentation of the processes and activities that are undertaken at the project level. This will enable outside independent agencies to analyze the problems of attitudes, skills, behavioral aspects, procedural bottlenecks and suggest necessary improvements. For this also the DWDC may work out formats for logbook and diaries to be maintained at the project level. These should be simple and easy to write and maintain, and should contain minimum required information to avoid unnecessary paper work.