GUIDELINES

ON

NATIONAL PROJECT
FOR

REPAIR, RENOVATION AND RESTORATION OF WATER BODIES DIRECTLY LINKED TO AGRICULTURE

Government of India
Ministry of Water Resources
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Contents

1. Background

1.1 Water is the lifeline of civilization. The biggest crisis that the world will face in the 21st century will be the crisis of water. Water is indeed a renewable resource but, in any given year, it is not inexhaustible. The crisis of water has affected the lives of millions of our fellow citizens. In some cities, whole households keep awake to receive one or two buckets of water well past midnight. In rural areas, the girl child is often pulled out of school in order to fetch water.

1.2 Through the ages, Indian agriculture has been sustained by natural and man-made water bodies such as lakes, tanks, ponds and similar structures. It has been estimated that there are about five lakh water bodies/tanks used for irrigation. Many of them have fallen into disuse and are in urgent need of repairs. These water bodies have been a part and parcel of minor irrigation in the country under which even today two-thirds of irrigated agriculture is covered in our country. Such Minor irrigation schemes generally suffer from problem of loss of storage due to silting of the tanks, poor maintenance and management, encroachment etc. Damage to various structures, inadequate surplussing arrangements, silting are some of the reasons for deteriorating conditions in the irrigation system. It is necessary to restore the storage capacity of water bodies with the purpose of recovering their lost irrigation potential.

1.3 The Union Finance Minister, in his Budget Speech 2004-05, proposed a scheme to repair, renovate and restore all water bodies that are directly linked to agriculture. It was proposed that in the current year, pilot projects would be taken up in one or two districts to be selected in each of the five regions of the country.

1.4 The scheme “National Project for Repair, Renovation and Restoration of Water Bodies directly linked to Agriculture” has been prepared to take up pilot projects in states for implementation by the State Governments for which funds will be released to state. Criteria and issues to be considered for preparing these guidelines were discussed in meeting with representative of some states and concerned Central Ministries.

2. Objective :

2.1 This is a pilot scheme for repair, renovation and restoration of water bodies directly linked to agriculture, to be taken up during the remaining period of X Plan. The objectives of the scheme are: (a) to restore and augment storage capacities of water bodies, and (b) to recover and extend their lost irrigation potential. Once the pilot scheme is completed and validated, it will form the basis for launching of the "National Water Resources Development Project" at much larger scale and spread to be completed in 7 to 10 years.

3. Scheme Design

3.1 The scheme envisages the States to take up the activities for project formulation in the manner generally prescribed as follows

3.1.1 Projects in one or two districts each in the states are to be taken up under the scheme. If some states do not come up with viable project proposal, the funds may be utilized for taking up priority projects of other states.

3.1.2 The States shall take up restoration of water bodies having original irrigation culturable command area of 40 hectare up to 2000 hectare, to revive, augment, and utilize their storage and irrigation potential. Water bodies having original irrigation culturable command area of less than 40 hectare are to be covered under other ongoing schemes/existing schemes.

3.1.3 For the above purpose, the States may also undertake repair of related structures like check dams, weirs, bunds, and water conveyance systems. The detailed project report (DPR) from the states shall ensure that not more 50% of a given project cost is earmarked for ancillary works for conveyance system.

3.1.4 DPR shall not include works for incomplete minor irrigation schemes or schemes completed within the last 10 years.

3.1.5 DPRs would clearly indicate the targeted benefits, both in physical and financial terms, relative to proposed costs.

3.1.6 The pilot project should be based on sound techno economic considerations so that the viability of the project is established and value addition for the proposed investment is achieved.

3.1.7 The states shall accord priority to the areas which are arid, semi-arid, drought prone, backward, tribal-dominated while selecting the districts. Proritization of water bodies are to be done by the respective states.

3.1.8 No proposals for funding establishment costs will be made under the scheme.

3.1.9 The projects are to be completed within a period of two years.

4. Preparation of Detailed Project Reports (DPRs):

4.1 The DPRs to be prepared by states should address the following considerations:

4.1.1 Selection of project: Project should be selected from consideration of priority, need for repair and restoration for providing benefits. **The main thrust of the project should be for augmenting storage capacity of the tanks/water bodies for recovering the lost irrigation potential**. The States shall take up restoration of water bodies having original irrigation culturable command area of 40 hectare up to 2000 hectare, to revive, augment, and utilize their storage and irrigation potential.

Details shall be given in regard to the background, present status of the project with reasons for deteriorating conditions of the project and alternatives, if any, which have substituted/modified the original project objectives, social/economic considerations and future plan. Arid/ Drought prone areas, Backward/weaker sections and particularly tribal dominated areas will be given due consideration while preparing

the project proposal and this should be appropriately brought out in the DPR.

4.1.2 **Type of project** : The type of project should be clearly brought out. Relevant information e.g. general topographical details, description of components of the project such as Renovation of Minor irrigation Tanks, check dam, weir, surface flow/lift, renovation of field channels etc shall be brought out. Other considerations like recharge of ground water, water utilization for other purposes are to be brought out appropriately. Measures for water utilization efficiency e.g. lining of canals etc. should be considered and adopted in the project proposal. Work of repair of related structures like check dams, weirs, bunds, and water conveyance systems should be clearly brought out.

4.1.3 **Command Area:** The total command likely to be irrigated from the project vis-a vis the original and lost storage, intensity of irrigation etc. should be brought out. This chapter should contain details relating to status of the existing conveyance system giving inter-alia details of existing deficiencies, which are hindering water use, status of maintenance, availability of funds for O&M, participation of Water Users' Associations etc. in the O&M activities, details of potential created and utilized and that targeted under the project.

4.1.4 **Project planning and design:** In the project formulation the following points should be considered among other issues involved.

4.1.4.1 **Data availability & hydrological studies**: General water availability giving hydrological conditions of the area, physiography covering climate, the source of availability of water, rain fall data including hydrological studies for water availability, quantum of water available vis-à-vis proposed storage capacity, should be considered. Sources of irrigation available in the command area vis-à-vis the requirement should be analyzed.

4.1.4.2 Design criteria and viability: Design criteria shall be elaborated and viability justified highlighting the basic requirements and importance related to the project. The targeted benefit from the project implementation bringing out quantitative assessment, incremental area brought under irrigation and other aspects will have to be clearly brought out.

4.1.4.3 Issues on convergence of the project with related activities under other schemes should be achieved and this aspect should be brought out clearly.

4.1.4.4 Peoples Participation, **Capacity building & survey for collection of baseline data:** A provision up to 10% of project cost will be kept for related capacity building & people's participation and surveys for collection of base line data for impact assessment and evaluation. Detailed surveys are to be undertaken in each district to establish base line data at the village level and also at the tank level for performance parameters considered appropriate. Parameters like agricultural production and productivity, fisheries production and productivity, fodder production and productivity, livestock production -and productivity, status of irrigation intensity, area irrigated, volume of water stored in the tank will be taken up for the purpose as applicable for the particular water bodies under the project.

Detailed surveys in the district will be taken up simultaneously with project implementation.

4.1.4.5 Catchment description: A brief description of the catchments i.e. plain, undulating, hilly including forests etc. shall be given with the following information.

a. Catchment Area map of the Project showing all upstream works affecting the flow into the reservoirs.

b. Full command Area maps showing all details of canals, branches, distributaries, Minors and outlets

4.1.4.6 Private owned water bodies are not to be considered for funding

4.1.5 Social/ecological consideration: Socio-economic status covering data on population, the type of population affected by the project and the likely social, environmental and ecological impact of the area is to be considered and commented upon.

4.1.6 Community involvement for project implementation and handing over of project to community on completion of project : Active community participation is necessary to ensure optimum utilization of assets and facilities created under the proposed scheme and, to sustain the scheme on long term basis. DPRs from the states will, therefore, include plan for involvement of panchayati raj institutions (PRIs) and the community - especially water users associations (WUAs) - to build, operate, monitor, and maintain the assets and facilities. DPRs should specify the plan for handing over the revived facility for operation, monitoring, and maintenance to community organizations such as WUA or PRI**.**

4.1.7 O & M of the facilities created under the Project: The O&M responsibility is proposed to be of the beneficiary community. An appropriate institutional framework is required to ensure viability and sustainability. Appropriate institutional framework for the purpose should be evolved simultaneously during project implementation from intense deliberation of related issues at different levels.

4.1.8 Cost aspect: The components of estimated cost of the project to be taken up as pilot project and phasing of cost i.e. cost to be incurred during the current year and subsequent years should be projected. All works proposed for execution should be classified leading to total assessment of the works. The detailed estimate of the project needs to be given. Their phasing and plan for taking up

these activities should be spelt out. The phasing should cover both physical and financial aspects.

4.1.8.1 For preparation of DPR, there will be limit of approximately Rs 30,000/per ha of the Culturable Command Area of the project. Individual components of a project have to adhere to Command Area Development (CAD) cost norms of MoWR.

4.1.8.2 In terms of additional irrigation potential restored under the project, an upper limit of approximately Rs. 80,000/per ha will be followed.

4.1.8.3 DPR would clearly indicate the targeted benefits, both in physical and financial terms, relative to proposed costs. Cost-benefit ratio of the projects in DPRs will generally conform to planning commission norms. Analysis like the economic rate of return may also be included.

4.1.8.4 No proposals for funding establishment costs will be made under the scheme.

4.1.9 Monitoring and evaluation

4.1.9.1 Water bodies serve the interest of local communities. It is imperative that a graded and bottom-up approach is established for progressive monitoring and evaluation of the revived water bodies at the local-district-state-central level. The DPR's will spell out this monitoring mechanism at these levels.

4.1.9.2 The states may also provide for such other periodic evaluation of the project as necessary, to be specified in DPR's, to draw suitable lessons to take the scheme forward with better efficiency.

4.1.10 Salient features : Salient features of the project proposal e.g. specific project component details, cost, time of completion of project etc. should be provided in the DPR.

5. Clearance of DPR from State Authority:

5.1 Projects need to be cleared from the State Technical Advisory Committee or an equivalent arrangement per procedure in vogue in a State, to select districts and, to approve the detailed project reports (DPR) for the project works for the selected districts under the Scheme. The environmental clearance and forest clearance from the State Government Departments has also to be obtained as per procedure in vogue. The project preparation should adhere to the guidelines of the Planning Commission also.

6. **Manner of approval of DPRs**

6.1 Central Water Commission (CWC) will be responsible for examination of DPRs received from the States, and for recommending those for approval by the Ministry of Water Resources (MoWR).

6.2 For that purpose, the States shall submit DPRs - duly approved by their TAC or equivalent arrangement - to the concerned regional office of the CWC.

6.3 The concerned regional office of CWC - in association with the concerned regional office of the Central Ground Water Board (CGWB) and their counter parts in the States where necessary - will examine DPRs and send their findings to CWC (headquarters).

6.4 CWC will forward DPRs with their considered views and recommendation to MoWR for approval.

6.5 To select DPRs for funding, a committee under the chairmanship of Additional Secretary, MoWR, will consider the DPRs recommended by CWC. This committee includes representative of Ministry of Agriculture, Ministry of Rural Development and officers from Ministry of Water Resources.

6.6 **Techno-economic appraisal by CWC :**

6.6.1 The Techno-economic appraisal for the proposed projects by CWC will include, inter-alia, the following aspects:-

(a) Scrutiny of the cost benefit aspects analysed in the DPR submitted by the State.

(b) Scrutiny of water availability study vis-à-vis proposed storage capacity.

(c) Scrutiny of soundness / viability of basic planning and alternatives studied.

(d) Considerations on groundwater regime and management / development related to the project proposal.

7. Post project sustainability

Post project sustainability is an important factor for Minor Irrigation projects.

7.1 Measures and consideration for ensuring post project sustainability need to be clearly brought out in the DPR's. This chapter would also highlight the existing set up for operations and maintenance and delivery arrangements up to farmers holding and other OFD works**.**

7.2 Legal status of provisions of regulatory Acts, administrative measures, methodology of achieving farmers' participation and realising of water charges etc. are to be detailed out along with proposal for rationalization of water charges.

8. Implementation Arrangement/Implementing Agency:

8.1 The project is planned for implementation on priority as per the present institutional arrangements, available in respective state with strengthening of community participation. The projects are generally technical input based for extending irrigation facility. Implementation arrangements also have to cater for appropriate consideration on this aspact.

8.2 District level Implementation Committee

8.2.1 There will be a District Level Implementation Committee (DLIC) to decide all issues on implementation management, supervision and effectiveness of the pilot project including post project sustainability.This committee will be chaired by the District Collector and The Vice Chairman of the Implementation Committee will be from some reputed NGO to be nominated by the Ministry of Water Resources, Government of India. The Committee will include representatives from WUAs, NGOs, Village Panchayats, Women, SC/ST and the landless. The DLIC will also provide a platform for working out active community participation in implementation, supervision and monitoring of the projects. A typical structure of DLIC is at Annex – I.

8.2.2 Executive Engineer of the nodal department in the state incharge for project implementation will function as Member Secretary for the DLIC. Member Secretary shall ensure utilization of the existing infrastructure with him for administrative support for day-to-day functioning.

8.2.3 The **functions of the District level implementation committee** will be as follows:

(a) Finalizing actual implementation strategy and management for effective implementation.

(b) Selection of private sector agencies and/or NGOs , local community and deciding implementation issues such as extent of involvement of contractor for execution of work.

(c) Deciding mode of Procurement of construction materials/goods and approve construction activity and works from time to time.

(d) Approving project plan for sensitizing the Panchayati Raj functionaries, WUA, related government officials, local opinion makers and politicians and the community regarding the merits and modalities of the community-managed programme of the project.

(e) **Deciding on formation of local level implementation committee** at WUA / Panchayat Level.

(f) Approving awareness campaign, participation and training (HRD) activities.

(g) To supervise quality in works and procurement.

(h) Monitoring, Supervision and Signing off on all completed works including all construction activity.

(i) Interaction with state & GOI as required.

8.3 The **WUA** will include all stake holders associated with the tank system such as women, SC/ST, landless and other vulnerable groups and not only command area farmers

8.4 Arrangement at State level

8.4.1 This is a State Sector Scheme .The Nodal Department in the State Government will have the overall responsibility for planning, implementation, supervision and monitoring of the Project.

8.4.2 The State would have an Apex Committee headed by Secretary/Principal Secretary in-charge of Minor irrigation/Water Resource/Irrigation department in the particular state. The Apex Committee will provide policy direction, approve the annual plan and also review and monitor implementation of the project. This Committee will decide strategy at the State Level and consider broad issues like convergence of the project with the other projects in the area and appropriate co-ordination between different departments. The committee will also address issues like long-term O&M arrangements through community organization like WUA/PRI, maintenance fund for the purpose and facilitate interaction at various levels. The Concerned Chief Engineer will be the Member Secretary of the Committee.

8.4.3 An Executive Committee shall be constituted by Apex Committee and shall be headed by Chief Engineer of Concerned Department. This committee will consider and identify project related issues for handling the same and report to the Apex Committee for assisting the Apex Committee in due discharge of its functions.

9 Financial Arrangement

9.1 The funding pattern of the scheme will be in the ratio of 75:25 (center: state). The central funding will be in form of grant to the states.

9.2 A budget provision for the total amount of the project for both Central plus State share is to be kept in the State plan for the year.

9.3 A pre-condition of sanctioning annual central funds to the States will be that they have made suitable provision of funds, including both central and states share, in the state budget.

9.4 The District level implementation committee shall maintain a separate Bank Account for implementation of the project in the district. The Fund Flow arrangement for the project is at Annex- II

9.5 The first two installments of central share shall be released on approval of DPR at half yearly interval. The third central installment will be

released on receipt of utilization certificate and the expenditure statement of the first installment (including the state's corresponding share). The subsequent installments would likewise be released after receipt of utilization certificates for the penultimate installment.

9.6 State should send Utilization Certificate to the government of India (GOI) for release of installment in the prescribed Performa. The utilization certificate must be prepared strictly on the basis of the Receipts and Payment Accounts**.**

9.7 The Audited Account for project works from the State is to be submitted to the GOI as per usual procedure.

10. Monitoring and Mid Term Review

10.1 Monitoring of minor irrigation projects is a State subject.

10.2 Monitoring of the scheme is to be done by the States with appropriate set up in the State in the concerned Department. The Monitoring agency has to be independent of the construction agency.

10.3 For the project graded and bottom-up monitoring mechanism to be established for progressive monitoring and evaluation of the revived water bodies at the local-district-state-central level.

10.4 State Level Committee as mentioned in para 8.4.2 will be in incharge of monitoring and evaluation of the Programme at State Level and thereby bring about a qualitative improvement in the implementation of the programme. State monitoring committee may incorporate CWC representative from their corresponding regional offices. Besides, the states may also provide such other periodic evaluation of the projects mentioned in para 4.1.9.2.

10.5 An appropriate system of monitoring of the projects will be taken up through CWC and CGWB in the states consisting of on-site examination of works and off-site analysis of states' monitoring reports. Such mid-course evaluations as necessary of the scheme during the plan period would also be taken up through CWC and CGWB.

11 Project Evaluation

11.1 The Ministry of Water Resources and the respective State may appoint independent institution to carry out evaluations of the project.

11.2 Services of the NABARD could be utilized for independent evaluation studies on the scheme toward validation of the pilot project with suitable inference.

12 Post Project Sustainability and Maintenance:

12.1 Resource for post project maintenance will consist of water charges/users charges and beneficiary contribution apart from the Government funds for major repairs in particular circumstances. The O&M resource requirement for the project on completion will have to worked out by the concerned State during implementation period of the scheme.

13 Completion Report containing Main findings on implementation of the project – recommendation for future projects

13.1 On completion of the project, a Project completion report is to be prepared by the Nodal department and submitted to the Ministry of Water Resources. The report should take in to account the views of the DLIC. The report should contain important observation on design and implementation of the project as regards its effectiveness. It should also focus on critical aspects of the scheme such as community involvement, O & M, development of tank management system for purpose assessment to enable suitable decision for the future scheme.

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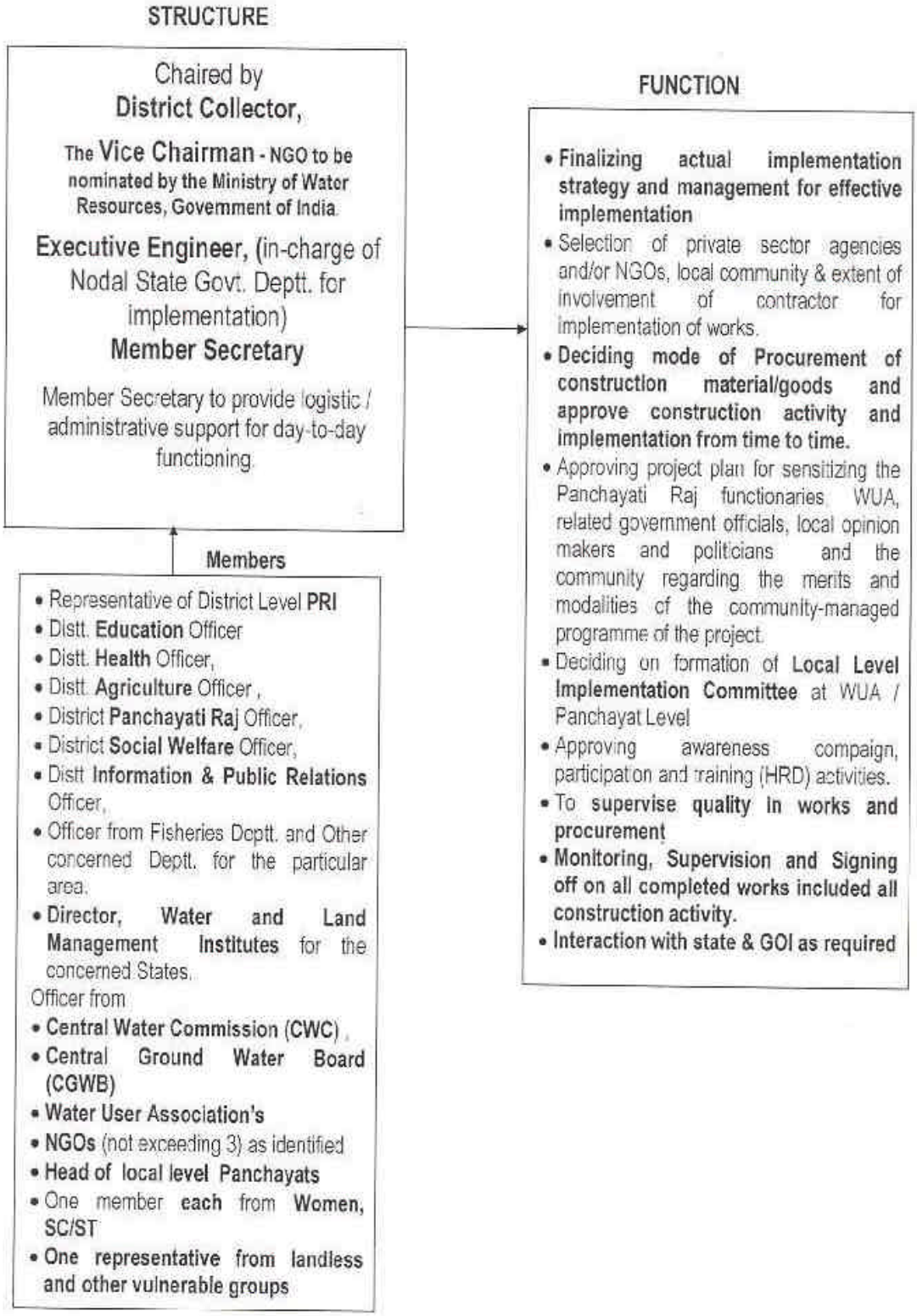
ANNEXURE - 1

STRUCTURE OF DISTRICT LEVEL IMPLEMENTATION COMMITTEE



Annex-II

Fund Flow arrangement for the project :

1. State Government will allocate/transfer the funds to be concerned MI Division through a Letter of Credit/authorization letter not later than five days of receipt of Central Share of funds.
2. Concerned MI Division will keep the funds in deposit works accounts of the Division.
3. The Divisional MI Engineer,. Who is also the Member-Secretary of District Level Implementation Committee (DLIC) shall expend the funds from this deposit account upon authorization by District Collector, the Chairperson of DLIC, per recommendation of DLIC.
4. The District Collector will make such authorization only on the express direction of DLIC after due deliberation.
5. District MI Division shall maintain account for Water Bodies Project works as a part of the Division's deposit works accounts, as well as separately (in proforma manner).
6. The District MI Division shall render proforma account along with Utilization Certificate countersigned by the District Collector to the States MI Department.
7. The Secretary (Irrigation/Minor Irrigation) shall render a consolidated Utilization Certificate to the MOWR.