

(For official use only)

NGRBA PROGRAMME FRAMEWORK

**NATIONAL GANGA RIVER
BASIN AUTHORITY**

MAY 2011

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without NGRBA authorization

CONTENTS

SL.NO.	TITLES	PAGE NO.
1	IMPLEMENTATION ARRANGEMENTS	3
2	DETAILED INVESTMENT FRAMEWORKS	14
3	FINANCIAL MANAGEMENT MANUAL	29
4	ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)	65
5	COMMUNICATIONS & PUBLIC OUTREACH FRAMEWORK	173
6	GOVERNANCE AND ACCOUNTABILITY ACTION PLAN (GAAP)	176
7	MEMORANDUM OF AGREEMENT- PROGRAME	179
8	MEMORANDUM OF AGREEMENT- INVESTMENT	187
9	PROCUREMENT MANUAL	202

IMPLEMENTATION ARRANGEMENTS

I. Institutional Arrangements

II. Key Elements of the NGRBA Program Implementation Process

III. Detailed Implementation Process for NGRBA Infrastructure Investments

IV. Detailed Implementation Process for Non-Infrastructure Investments

A. Introduction:

The need for revamping the river conservation program was widely recognized in view of the shortcomings in the approach followed in Ganga Action Plan (GAP). It was felt necessary that a new holistic approach based on river basin as the unit of planning and institutional redesign may be adopted. Accordingly, the Government of India has given Ganga the status of a National River and has constituted the National Ganga River Basin Authority (NGRBA) on 20th February 2009 under Section 3(3) of the Environment (Protection) Act, 1986.

The NGRBA is a planning, financing, monitoring and coordinating body of the centre and the states. The objective of the NGRBA is to ensure effective abatement of pollution and conservation of the river Ganga by adopting a river basin approach for comprehensive planning and management.

The NGRBA program will be a multi-disciplinary initiative involving multiple dimensions of Ganga clean-up and conservation, and therefore will span across many sectors, including but not limited to social, environment, urban development, water resources, agriculture, industries, and energy. Program planning and implementation would therefore require working across ministerial/state/departmental boundaries and also across levels of government: central, state and local. The program activities would include both broad-based as well as locally targeted communications and community participation campaigns, and research to address the critical knowledge gaps. Keeping this in mind, the NGRBA operational institutions at central and state levels are envisaged to have the requisite operational flexibility and multi-sectoral skills.

I. Institutional Arrangements

1. ***Political Support and Policy Guidance.*** The NGRBA's apex policy and decision-making structure has been established by the Government of India, as per the Notification under Environment Protection Act (1986). Under the same Act, the five NGRBA program states have notified the State Ganga River Conservation Authorities (SGRCAs) thereby defining the apex policy and decision-making structure at the state level. The Union Ministry of Environment and Forests (MOEF) is the nodal agency for the NGRBA program, and will have the lead responsibility for program implementation. Similarly, the SGRCAs' state level nodal departments will have the responsibility for program implementation in the respective states.

2. ***Program Management Institutions*** The NGRBA Program Management Group (PMG) as a registered society, with suitable structure, staffing, powers and leadership, should fulfill the objectives of ensuring effective implementation of the overall NGRBA

program at the national level. Each of the NGRBA states is similarly setting up the State (SGRCA) Program Management Group (SPMG) as a registered society, to ensure effective implementation at state level with the exception of Jharkhand, to be provided with one dedicated cell within the UD Department, as a very small stretch of the Ganga main stem passing through the state.

3. **Executing Agencies.** Execution of the infrastructure investments will be done by the Executing Agencies (EAs), selected for each investment. The choice of EAs includes the existing state-level technical agencies which have the mandate of urban infrastructure (especially wastewater) management in their respective states. In the medium to long term, establishment of new ones should be encouraged in each state, including public-private joint venture infrastructure companies, which will need to undergo assessments by the SPMGs to ascertain its capacity to manage the technical, program management, procurement, financial management and safeguards aspects of the investment .

4. **Program Management Consultancy.** This consultant is planned to provide program management support to PMG, including planning, technical support for investments review and appraisals, portfolio management, procurement, financial management, monitoring and evaluation, and reporting

5. **Technical Support Consultancy.** This consultant is planned to provide technical support to SPMGs and EAs, for upgrading the process and practice of investments preparation and execution to global standards.

6. **Other Partner Agencies.** The PMG and SPMGs will collaborate with and seek support and partnership with a range of other agencies, to draw upon their specialized expertise and supplement the capacity of main implementing agencies. These will include international, national and local knowledge institutions, private sector business houses and industries, and civil society groups.

7. **Tiered Implementation Structure.** Program implementation at various levels is therefore envisaged as follows: (a) National Level: PMG, (b) State level: SPMG, and (c) Activity level: Executing Agencies (EAs) selected for specific activities, with local coordination for planning and implementation provided by Urban Local Bodies (ULBs) where needed. A **brief description of the key actors** and their implementation responsibilities is the following sections.

8. **National Level – PMG.** The PMG is established, with the provision of (i) adequate and formal devolution of powers to the PMG, consistent with the NGRBA Notification, to ensure appropriate level of operational autonomy; (ii) single-point responsibility for planning and execution of the NGRBA program; (iii) powers to manage its human resources, with the objective of attracting and retaining well-qualified staff; and (iv) institutional sustainability as the permanent entity responsible for the conservation and health of the river Ganga in the long term.

9. **PMG Role and Responsibilities.** The PMG will have the mandate of national-level management of the entire NGRBA program. The PMG will ensure that the objectives of the NGRBA program are fully achieved in a timely manner. The main functions of the PMG include:

- (a) overall project planning and management; direct implementation of the national level activities; ensuring satisfactory implementation of the state-level investments

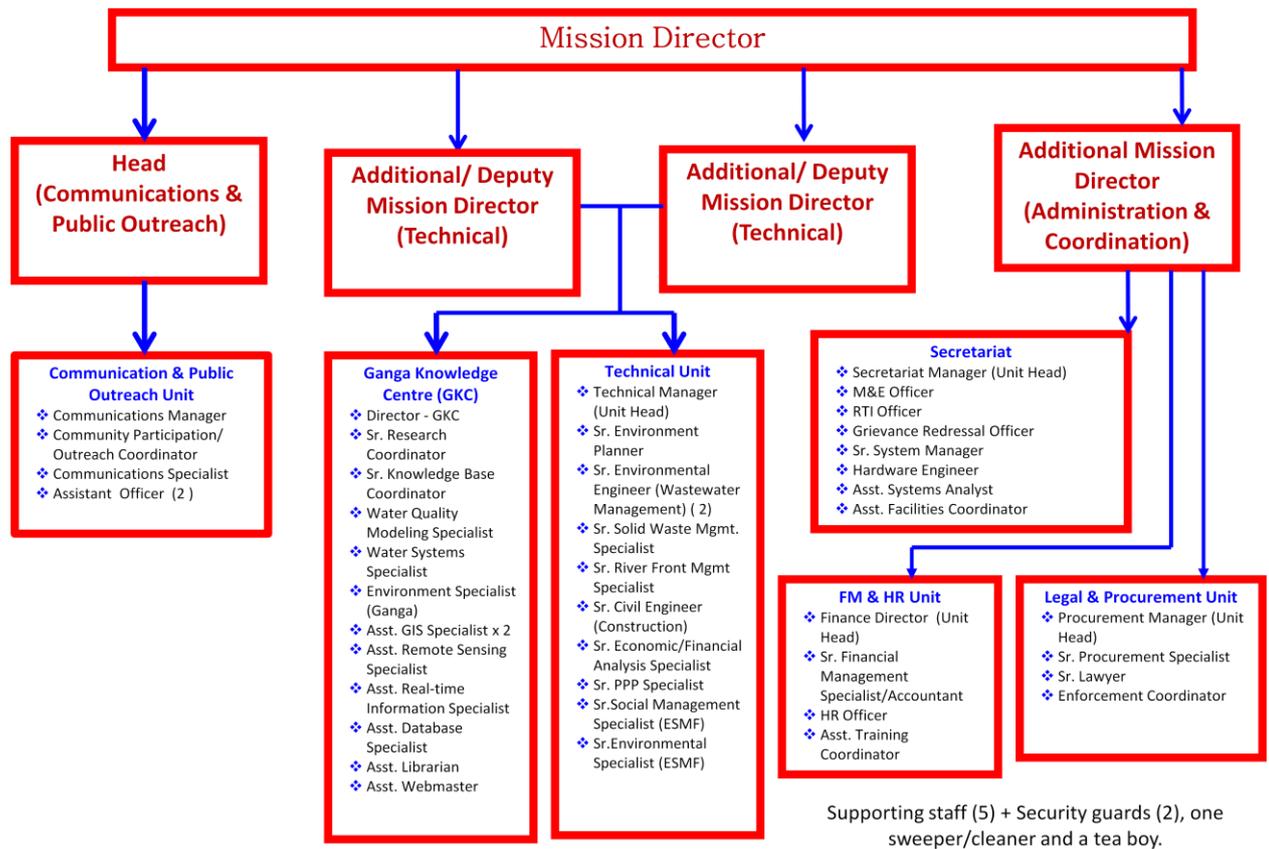
- and activities in accordance with the agreed NGRBA program framework and implementation arrangements; providing guidance, support and approvals to the SPMGs where needed; and monitoring implementation performance;
- (b) ensuring compliance with agreed financial management policies and procedures including management of program funds, timely release of advance program funds to the states, conducting external audits and ensuring compliance with audit observations;
 - (c) capacity building of all program partners; managing national IEC campaigns, stakeholder consultations and community participation;
 - (d) ensuring compliance with the agreed quality assurance of physical infrastructure investments; and ensuring compliance with the relevant Central and State Govt. policies;
 - (e) regular monitoring and evaluation of program performance, including regular review of the NGRBA investments framework and implementation arrangements, and ensuring requisite course corrections as needed.

10. ***PMG Structure and Staffing.*** The relevant details of constitution of PMG as a society (MoA/registration, bylaws, mandate, composition, functions, powers and operational procedures) are contained in separate documents.

- (a) The PMG is headed by the Mission Director of the rank of Joint Secretary of GoI.
- (b) The indicative PMG structure is presented in Figure 1. It will include specialists in basin planning, wastewater engineering and management, ecology, environment and social management, finance, operations, procurement, knowledge management, IT, communications, human resources management, economics, and monitoring and evaluation. The professional staff may be assigned from within the central/state government agencies or recruited from private sector on contract basis.
- (c) The PMG will be supported by a Project Management Consultancy, which will provide assistance in key areas of investment preparation quality review, portfolio management, procurement and financial management. In addition the PMG may from time to time recruit agencies (individuals, institutions or firms) as necessary to strengthen program planning and management.

11. ***State Level – SPMG.*** The SPMGs have been constituted in each of the Ganga river basin states, as registered societies of the state government, except in the case of Jharkhand to be performed by a dedicated cell within the UD Department, with the objective of serving as the dedicated institution for effective implementation of the NGRBA program activities at the state level, and as the state-level entity responsible in the long term for the conservation and health of the state's stretch of the river Ganga.

Figure 1: Organizational Structure of PMG



12. **SPMG Role and Responsibilities.** The SPMGs are the respective state level counterparts of the PMG and have state level responsibilities for management and implementation of the NGRBA Program. The main functions of the SPMGs include:

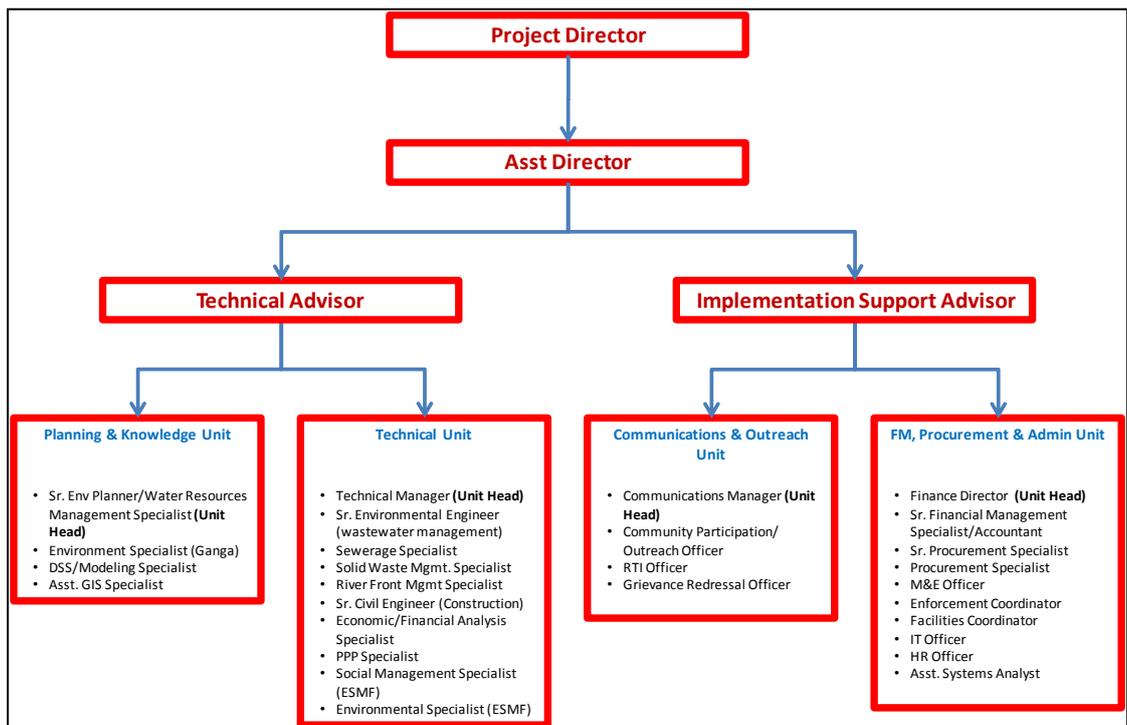
- (a) overall program planning and management at state level, ensuring satisfactory implementation of the state-level investments and activities in accordance with the agreed NGRBA program framework and implementation arrangements; providing guidance, support to the state EAs; and monitoring implementation performance of the EAs;
- (b) ensuring compliance with agreed financial management policies and procedures including management of program funds, timely release of advance program funds to the EAs, conducting concurrent internal audits for all state level activities and ensuing compliance with audit observations, and submitting reimbursement claims to the PMG;
- (c) capacity building of EAs; managing state level IEC campaigns, stakeholder consultations and community participation; and other state level activities in the Institutional Development Component (Component One) of the project;

- (d) ensuring compliance with the agreed quality assurance of physical infrastructure investments; and ensuring compliance with the relevant Central and State Govt. policies;
- (e) regular monitoring and evaluation of program performance, including regular review of strategies and implementation arrangements in the context of implementation experiences and for ensuring requisite course corrections as needed; and
- (f) liaising with the PMG, including sending quarterly progress reports to the SGRCA and the PMG.

13. **SPMG Structure and Staffing.** The relevant details of the constitution of SPMGs (MoA/registration, bylaws, mandate, composition, functions, powers and operational procedures) are contained in separate documents.

- (a) The SPMG will be headed by a Project Director.
- (b) The indicative SPMG structure for a typical state is presented in Figure 2. It will include specialists in basin planning, wastewater engineering and management, ecology, environment and social management, finance, operations, procurement, knowledge management, IT, communications, human resources management, economics, and monitoring and evaluation. The professional staff may be assigned from within the state government agencies or recruited from private sector on contract basis.

Figure 2: Organizational Structure of Typical SPMG



14. **Selection and Function of Executing Agencies (EAs).** The NGRBA PMG will select EAs for national-level activities. In case of local infrastructure investments, the EA for state-level activities will be chosen by the SPMG with collaboration and coordination

of the relevant ULB. The choice of EAs for early investments selected under the program includes the existing state-level technical agencies which are in charge of the development of urban infrastructure in their respective states. The selection of additional EAs for infrastructure investments under the NGRBA program will be on an on-going basis. The EA for each activity would be selected on the basis of following criteria:

- (a) The EA should have adequate autonomy and financial powers to implement the given sub-project, including the ability to sign contracts and take liability for failure / under performance of assets.
- (b) It should have adequate project management capacity to plan, design, and implement the sub-project.
- (c) It should have adequate technical competence to prepare (or got prepared through agencies) the FR and the DPR, and to implement the sub-project.
- (d) It should have adequate professional expertise and skilled staff with cumulative experience of managing similar projects (Planners, Engineers, Social Scientists, Managers, Procurement Specialists, Financial Management Specialists, etc.), which would be required for implementing the sub-project. It should also have the ability to quickly recruit required quality staff from the market in time or to hire a consulting agency to meet the short fall in capacity.
- (e) It should have last three audit reports available; and if there are any significant unresolved internal control weaknesses reported in these audit reports, a time-bound action plan to resolve these will need to be agreed.
- (f) It should have an adequate system of check measurement/inspections of works.

The main functions of the EA should be as follows:

- (a) The main function of the EA would be to prepare and implement the specific activity/investment and put in place institutional arrangements and other resources needed for satisfactory and sustainable operation and maintenance of the assets created.
- (b) This will include: (i) preparing Feasibility Reports and Detailed Project Reports (DPRs) as per the requirements of the NGRBA framework and the Guidelines for Preparation of Project Reports under NGRBA / NRCP; seeking appropriate technical and administrative approvals from within their own departments and concurred by the SPMG; (ii) collaboration and coordination with other relevant government departments/agencies, ULBs, civil society organizations and beneficiaries; (iii) procurement of works and goods with support from the SPMG; (iv) construction/installation of facilities including contract management and day to day supervision; ensuring compliance with relevant Central and State Govt. policies; certifying works, making payments and preparing completion reports; and (v) managing program funds including compliance with agreed FM policies and procedures.
- (c) The EA will report to the respective SPMG in case of state level activities or to the PMG in case of national-level activities in regard to implementation progress and performance of the investments, and will provide technical, administrative, accounting, audit and other progress reports. The division of roles and responsibilities, including administrative and fiduciary arrangements, between the SPMG and the EAs has been agreed and will be documented in the signed MoUs.
- (d) The criteria of EAs' selection would be (i) sufficient technical expertise (ii) project management capacity and (iii) financial powers to adequately plan for, design, implement, and operate investments.

II. Key Elements of the NGRBA Program Implementation Process

15. NGRBA and the state nodal departments have prepared and agreed detailed investment frameworks, implementation process flow (including planning, preparation, appraisal, implementation and monitoring and evaluation), guidelines for investment preparation, Memoranda of Understanding, and Delineation of Functions and Powers of different implementing entities, which collectively define and form the basis of program implementation and performance monitoring. The main features of these are summarized below.

16. **Investment Frameworks.** Investment frameworks have been developed for selecting and implementing infrastructure investments in the four key sectors of intervention under the NGRBA program - municipal wastewater, industrial pollution, solid waste management and river front management.

- (a) The frameworks prescribe criteria and quality assurance standards covering various aspects including eligibility, prioritization, planning, technical preparation, financial and economic analyses, environment and social management, long term O&M sustainability, community participation, and local institutional capacity. The objective is to ensure that the investments are well-prepared and amongst the most effective in reducing the pollution loads, and implemented in a manner that makes them sustainable.
- (b) Given the long-term nature of the NGRBA program and the fact that universe of potential investments is large, the adoption of the framework approach effectively sets the “rules of the game”, and will allow infrastructure investments to be selected on a dynamic and ongoing basis.

17. **Implementation Process Flow.** The step-by-step process along with roles and responsibilities of the entities involved in implementation of NGRBA program have been agreed and documented. The implementation process covers the various aspects including annual planning, investment prioritization, a two-stage (feasibility and detailed project report) preparation and appraisal process, execution, O&M, eventual assets transfer to local bodies, financial management, community engagement, environment and social management, governance and monitoring and evaluation.

18. **Guidelines for Infrastructure Investments Preparation.** A two-step process has been agreed for preparation and appraisal of investments, whereby investments would be appraised at both concept and detailed project report stage. NGRBA project report preparation guidelines have been prepared and disseminated for preparation of feasibility stage and detailed project reports, including requisite contents, methodologies, and standards to be followed.

19. **Model Agreements/MoAs.** The following instruments have been prepared to operationalize the agreed institutional model and implementation arrangements: (i) Programme level Tripartite Memorandum of Agreement (MoA) amongst the PMG, the SPMGs and ULBs; and (ii) Project level Tripartite Memoranda of Agreement (MoA) amongst the SPMG, the EA and the ULB for ensuring clarity on roles and responsibilities of various parties regarding execution, O&M, and eventual transfer of investments to local bodies.

20. ***Powers of Approvals.*** Powers and procedures for technical and administrative approvals of investments, for award of contracts for works/goods and services, and for making payments have all been well defined in the respective delegation of powers of PMG and SPMGs. To ensure efficiency in implementation most of the powers have been delegated to the lowest appropriate levels, adopting the principle of subsidiarity. Thus, once the annual action plan is cleared by the NGRBA, most implementation related powers are vested with the PMG, SPMGs and EAs for their respective components.

21. ***Post-Implementation Management of Assets Created.*** The frameworks and implementation arrangements require that each DPR includes a detailed plan for operation and maintenance of assets that will be created under the NGRBA program. These plans must identify the institutional responsibilities as well as funding and other resources that would be required for their long term sustainable operations.

III. Detailed Implementation Process for NGRBA Infrastructure Investments

Stage 1: Annual Planning

1. A state level annual planning meeting would be organized by the SPMG in early September every year, with all relevant ULBs and EAs participating, to prepare the draft annual activities plan for the state and approved by the State Executive Committee (SEC) of SRCA. The SPMGs would submit to PMG the annual action plans by the end of September for the next Financial Year.

2. For finalization of the state annual action plans, the PMG would organize an annual planning meeting in October every year, with the 5 basin states participating. These interactions between the SPMGs and the PMG would inform the preparation of the state annual action plans to ensure that the planning meets the overall program objectives as well as the states' needs and priorities. The World Bank would provide relevant inputs in the consultations at both the SPMG and PMG levels.

3. The PMG would prepare the NGRBA Annual Action Plan including a list of proposed sub-projects, by November every year, for the next financial year incorporating the World Bank's considerations. This would be based on the annual action plan and supported Concept Notes, prioritized according to the broad agreed prioritization and selection criteria, and submitted by SPMGs, together with proposed centrally managed activities to be implemented directly by the PMG or through national level EAs.

4. The Action Plan would be submitted to the Empowered Steering Committee (ESC) of NGRBA for concurrence by end January every year. Revision of the annual Action Plan during the year would follow GoI's normal budget revision timetable (this is to ensure revised budget estimates are available for the remainder of the financial year).

Stage 2: Feasibility Report (FR) Preparation and Evaluation

5. The SPMG will coordinate the preparation of FRs for the sub-projects included in the annual plan, by the respective EAs. The FR should include **inter alia macro-planning, and options scoping and analysis.**

6. The ULB would enter into a Memorandum of Agreement (MoA) with the SPMG and the EA to proceed with and accept the sub-project as well as related O&M obligations, subject to the eventual implementation of the proposed investment.

7. The ULB and the EA with support of the SPMG, conduct consultations with the local community on all aspects of the proposed sub-project, while making available all relevant information to the public.
8. The SPMG may also take up for consideration concepts proposed by entities other than the EAs; if a concept is approved the SPMG along with the concerned ULB would need to identify an EA.
9. Investments for which the DPRs already exist but for which feasibility-stage analysis has not been carried out would also require FRs.
10. The cost of preparation of the FR would be borne by the EA, and will be reimbursed at the stage of final DPR approval.
11. For all infrastructure investments which would become ULB assets, the consent of the relevant ULB (from appropriate ULB authority) should be attached in the FR. Without this consent, the FR will not be accepted. It is intended that all infrastructure and assets created and/or supported by the project would become ULB assets, hereby consolidating the commitment to ownership, and sustained operations and maintenance, and emphasizing community involvement. In no case the SPMG should forward an FR to the PMG without a general body resolution of the ULB.
12. The SPMG would consider the FRs only for those investments which are included in the approved long-list of investments in the annual plan.
13. The SPMG would not clear any FR which does not have identification of estimated land parcels required for implementing the activity, along with tenure details of the land parcels.
14. The SPMG would evaluate the FR to ensure that it meets the requirements of the NGRBA investments framework and the Guidelines for Preparation of Project Reports under NGRBA / NRCP. The evaluation process should be carried out in coordination with the relevant ULB. The SPMG would make a decision in maximum one month. It can either (i) forward the approved FR to the PMG, or (ii) send it back to the sub-project Executing agency for modification.
15. The PMG would evaluate the FR to ensure that it meets the requirements of the NGRBA investments framework and the Guidelines for Preparation of Project Reports under NGRBA / NRCP. The PMG would convey its decision on the FR within a maximum of one month. It can either (i) approve the FR, or (ii) send it back to the SPMG for modification. The FRs does not require approval from the Empowered Steering Committee (ESC) of the NGRBA.
16. Approval of FR means that DPR preparation can be commenced. Approval of FR in no case indicates commitment or approval to finance the proposed investment.
17. For FRs with pre-existing DPRs: if the DPR is in-line with the findings of the FR, then that DPR may be accepted for review after suitable modifications; if the DPR is not in line with the findings of the FR, that DPR may need to be reinvestigated, designs to be readjusted, and cost estimates to be prepared using current rates, or a new DPR may be prepared.

Stage 3: DPR Preparation and Evaluation

18. The SPMG would communicate FR approvals (by the PMG) to the relevant EA. The SPMG has the right to designate a different EA for DPR preparation, if found expedient.
19. DPR preparation would include environment and social assessment as per the Environment & Social Management Framework.
20. The cost of preparation of the DPR would be borne by the EA, and will be reimbursed at the stage of final DPR approval.

21. Immediately after FR approval and in parallel with DPR preparation, the EA along with the ULB would initiate land acquisition process for the project. This would facilitate identification of the land, its survey and preliminary cost estimation so that the State Govt. is in readiness to issue the appropriate notification under prevalent LA Act upon approval of DPR for speedy acquisition of the land.

22. The DPR would be approved by the SPMG in consultation and coordination with ULB. The evaluations would include site visits as required. The SPMG would communicate its decision, with appropriate state-level consent as needed, in a maximum of 30 days. It can either (i) forward the approved DPR to the PMG, or (ii) send it back for modification.

23. The Memorandum of Agreement (MoA) previously entered into amongst the ULB, the EA and the SPMG will be updated. The respective ULB (or prospective long term sub-project owner) would undertake, based on the updated DPR proposals and cost implications, to proceed with and accept the sub-project investments and all related operational and maintenance obligations, subject to the eventual implementation of the proposed investment.

Stage 4: Appraisal and Approval of Sub-projects

24. PMG would evaluate the DPR to ensure that it meets the requirements of the NGRBA investments framework and the Guidelines for Preparation of Project Reports under NGRBA / NRCP within maximum of 60 days. The evaluations would include third party appraisal site visits and public consultations as required. The possible decisions are either (i) recommend approval of DPR, (ii) send back to the SPMG for modifications.

25. In either case the appropriate DPR appraisal note would be prepared by the third party appraisal agency in line with the “Guidelines for Preparation of Project Reports under NGRBA / NRCP”.

Stage 5: Confirmation of Appraisal of Sub-projects and Approval to Finance

26. The sub-projects (together with supporting documentation, including the recommended DPRs) would be placed, following clearance by the PMG, to the Empowered Steering Committee (ESC) of the NGRBA or to the Secretary (MOEF) for consideration. Formal approvals would be based on the respective levels of authorization and estimated sub-project costs. Sub-projects with estimated costs up to about Rs 25 crores (\$US 5.5 million) could be approved for implementation by the Secretary (MOEF) based on recommendations of the PMG. Sub-projects costing more than this amount would be submitted for ESC for its consideration.

Stage 6: Execution - Bid Documents and Bidding

27. Wherever land acquisition is involved, after DPR approval, the State Govt. would move immediately to disburse the award amount and assistance as per the Environment and Social Management Framework so as to expedite the possession of the land prior to bids issuance.

28. The EA would be responsible for the preparation of bidding documents and implementation of procurement.

29. The EA committee for evaluation and award of bids would have at least one member of SPMG and one representative of the local ULB.

Stage 7: Construction Supervision, Quality Assurance, Monitoring and Evaluation

30. The EA would be responsible for putting in place arrangements for supervision of all contracts. All civil and mechanical works investments would require comprehensive on-site construction supervision, in accordance with international best practice. If required, the EAs may procure and manage supervision consultants to address any capacity gap in the EA for effective construction supervision.

31. The “Engineer to the Contract” would in each case be clearly set out in the Contract documents, and would generally be a representative of the supervision consultants wherever employed.

32. The SPMG would appoint independent/third-party inspection (TPI) consultants, to supervise the execution of infrastructure investments under the NGRBA program, including timely progress, quality of works and proper documentation and reporting as delineated in the Guidelines for Preparation of Project Reports under NGRBA / NRCP.

33. M&E / Result Framework Document (RFD) would be the responsibility of SPMG/PMG and 6-monthly M&E / RFD reports will be prepared.

34. A city level Monitoring Committee in each ULB would also help monitor the implementation of investments

35. Works would be handed over to the sub-project owner (generally the ULB) on completion of the designated period of maintenance (generally 6 months to 1 year, depending on sub-project complexity) and following final acceptance of completion of works arising during the defects liability period, if required.

36. Contracts would include provision for 15 years O&M of the sub-project, including all subsystems. The sub-project contractor would therefore operate and maintain for a fee the completed works constructed under the sub-project for a 15 year period.

IV. Detailed Implementation Process for Non-Infrastructure Investments

37. Proposals for innovative pilots and for communications and social outreach would include funding windows managed by the PMG, which would evaluate the proposals submitted in these areas twice a year (October and April) and make awards.

38. The process and format for infrastructure pilot proposals would be same as that for infrastructure investments under the framework (i.e. FRs and DPRs would be needed); however the pilots need not comply with all requirements of the investment framework and the Guidelines for Preparation of Project Reports under NGRBA / NRCP.

39. The proposals for research and communication initiatives can be provided in a general concept note format.

DETAILED INVESTMENT FRAMEWORKS

A. Introduction:

The need for revamping the river conservation program was widely recognized in view of the shortcomings in the approach followed in Ganga Action Plan (GAP). It was felt necessary that a new holistic approach based on river basin as the unit of planning and institutional redesign may be adopted. Accordingly, the Government of India has given Ganga the status of a National River and has constituted the National Ganga River Basin Authority (NGRBA) on 20th February 2009 under Section 3(3) of the Environment (Protection) Act, 1986.

The NGRBA is a planning, financing, monitoring and coordinating body of the centre and the states. The objective of the NGRBA is to ensure effective abatement of pollution and conservation of the river Ganga by adopting a river basin approach for comprehensive planning and management.

The NGRBA program will be a multi-disciplinary initiative involving multiple dimensions of Ganga clean-up and conservation, and therefore will span across many sectors, including but not limited to social, environment, urban development, water resources, agriculture, industries, and energy. Program planning and implementation would therefore require working across ministerial/state/departmental boundaries and also across levels of government: central, state and local. The program activities would include both broad-based as well as locally targeted communications and community participation campaigns, and research to address the critical knowledge gaps. Keeping this in mind, the NGRBA operational institutions at central and state levels are envisaged to have the requisite operational flexibility and multi-sectoral skills.

B. NGRBA Investments Framework

1. General Criteria for All Sub-projects

- 1.1 Sub-projects should be from the five NGRBA states, namely: Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal.
- 1.2 Sub-projects must serve the areas falling under ULBs on the banks of the main stem of Ganga, or industrial areas on the banks of main branch of Ganga (including both distributaries of Ganga after Farakka).
- 1.3 Sub-projects must directly result in water quality improvements in the main stem of the Ganga, or on selected identified stretches of tributaries. In cases where water quality in the main stem of the Ganga is significantly affected by poor water quality of tributaries, then the sub-projects directly leading to improvements in the water quality of these tributaries may be eligible (For this, the water quality parameters may be considered for (i) the relevant tributary before joining the main stem of Ganga, and (ii) the Ganga after the confluence with the tributary.

- 1.4 Sub-projects which may *indirectly* lead to improvements in water quality in Ganga may be eligible if the linkages with improvement in the water quality are convincingly demonstrated.
- 1.5 Sub-projects must follow all social, environment and financial management requirements of the NGRBA Program.
- 1.6 Sub-projects must adhere to the Guidelines for Preparation of Project Reports under NGRBA / NRCP.

2. Criteria for Municipal Wastewater Sub-projects

2.1 Eligibility Criteria

- 2.1.1 Till such time as the Ganga Basin Master Plan (GBMP) is fully prepared, a prioritization method will be adopted for selecting wastewater investments according to their relative effectiveness in reducing the pollution loads entering the Ganga. Such prioritization method is based on the quantum of wastewater treated by the sub-project, and its impact on the water quality of Ganga during lean flow conditions at the location of discharge. All the project in the pipeline would be sorted in descending order depending on their impact. In order to be considered for NGRBA funding, a wastewater sub-project would need to be in the top half of sub-projects in the pipeline. In any given year, not more than 70% of the portfolio of wastewater sub-projects (by value) should consist of these high priority investments. However, additional projects may also be considered (outside of these criteria) in order to accomplish the Mission Clean Ganga.
- 2.1.2 Explicit and informed consent of ULB through general body's resolution, as per the municipal laws, is required at the time of submission of Feasibility Report as well as of DPR. The consent should indicate recognition of the nature, scale, and cost of the investment, especially the projected O&M costs; and the roles and responsibilities of the ULB including an undertaking to operate the asset after the contract period. FRs or DPRs without this consent would not be considered eligible.
- 2.1.3 The proposed Executing Agency (EA) for the sub-project should be selected by SPMG in consultation and coordination with the relevant ULB.
- 2.1.4 DPRs must be based on approved Feasibility Reports (FR) which include appropriate macro-planning, and options scoping and analyses.
- 2.1.5 All sub-projects with significant O&M needs (such as solid waste management, WWTPs, and pumping stations) would need to be implemented with contracts that include long-term (15 years) O&M. Design-Build-Operate (DBO) or other long-term PPP arrangements may be considered.
- 2.1.6 O&M costs must be estimated based on specific calculations for each sub-project (as opposed to using thumb-rule percentages).

- 2.1.7 O&M of the complete sewerage system (including sewer networks and pumping stations) should be combined in the DBO contract for the new facility, wherever possible.
- 2.1.8 Performance Bank guarantees would need to be provided by the selected operator for the specified period of O&M.
- 2.1.9 Technology selection for wastewater treatment must be on lowest lifecycle cost basis, specified for the local conditions and required degree of treatment. The 15-years O&M cost would be used as the measure of lifecycle cost. The values of the key parameters (e.g. characteristics of influent wastewater, if available; required water quality parameters of effluent; energy price; land price; manpower price, etc) for this calculation must be provided for the local conditions by the EA in the bid documents.
- 2.1.10 For sewerage investments, house connections strategy must be developed and included in the FR/DPR. The cost of providing house connections up to property line will be eligible for funding under the NGRBA program, and the DPR must include the costs and plans for the same.
- 2.1.11 As part of its consent/approval of the DPR submitted to NGRBA program for funding, the relevant ULB will commit to undertaking awareness campaigns to encourage house connections in the areas served by the funded sewerage investments.
- 2.1.12 As part of their consent/approval of the DPR submitted to NGRBA program for funding, the relevant ULBs may engage in the ULB capacity building program, aimed at strengthening the technical, financial and management capacity of the ULB. ULB will undertake to provide requisite staff, office space, logistics support, for successful implementation of the agreed capacity-building activities.
- 2.1.13 The ULB should provide an undertaking to allow monitoring of the sub-project facilities/performance by third party for quality assurance as required by the NGRBA program.
- 2.1.14 The DPR preparation would include environmental and social assessment as per the Environment & Social Management Framework.
- 2.1.15 Sub-projects during the construction and operation phases will be subject to monitoring by State Pollution Control Boards, as part of consent mechanism.
- 2.1.16 Sub-projects comprising component of land acquisition will be accorded sanction at two stages. "In Principle" approval will be obtained first, on the basis of the FR, and will be followed by DPR approval once the required steps in the land acquisition process are completed.
- 2.1.17 Immediately after FR approval and in parallel with DPR preparation, the EA along with the ULB would initiate land acquisition process for the project. This would facilitate identification of the land, its survey and preliminary cost estimation so that the State Govt. is in readiness to issue

the appropriate notification under prevalent LA Act upon approval of DPR for speedy acquisition of the land.

- 2.1.18 The FR should assess whether the sub-project has the potential for greenhouse gas (GHG) reduction. The DPR should provide an estimate of this reduction and its design implications.

2.2 Appraisal Criteria

2.2.1 *Technical Standards of Preparation*

- 2.2.1.1 Preparation should be based on a suitable design period for each kind of asset (e.g.: civil works: 30 years, E&M equipment: 15 years; WWTPs: 10 years) based on forecasts of: population, water use/supply, and wastewater quantity and quality. These assumptions must be suitably validated.
- 2.2.1.2 Sub-project formulation must be based on detailed field surveys, including comprehensive house connection survey; site investigations and data collection.
- 2.2.1.3 Field surveys and investigations must be conducted as per prescribed guidelines.
- 2.2.1.4 All sewer design and construction should be in accordance with the standard literature, such as the CPHEEO Manual, Guidelines for Preparation of Project Reports under NGRBA / NRCPC, and international best practice. Standard software should be used for design to optimize sewer size and slope. Existing sewer networks should be examined for synchronization with proposed network. Measures should be included for addressing the problem of solids deposited in sewers, and for ensuring the effective separation of storm water and water supply systems from wastewater systems.
- 2.2.1.5 For pumping stations, whether wet well only or combination of wet well and dry well design is used must be based on techno-economic considerations. Size/capacity of pumps and sumps should be worked out as per the Guidelines for Preparation of Project Reports under NGRBA / NRCPC.
- 2.2.1.6 Technology selection for WWTPs must be on lowest lifecycle cost basis, specified for the local conditions and required degree of treatment. The bids for long term contracts (including capital costs plus 15 years O&M cost) would be used as the measure of lifecycle cost. The values of the key parameters (e.g. characteristics of influent wastewater, if available; required water quality parameters of effluent; energy price; land price; manpower price, etc) for this calculation must be provided for the local conditions by the EA in the bid documents. Detailed analysis of sewage must be carried out to determine influent design parameters for WWTP. Automation should be encouraged in the operation of WWTPs in order to ensure efficiency to be encouraged.
- 2.2.1.7 Sludge management strategy must be developed in conjunction with wastewater treatment strategy.

2.2.1.8 Possibility of covering isolated residential pockets and slums through decentralized conveyance and treatment systems must be explored.

2.2.1.9 Pumping stations and WWTP facilities must have the provision of diesel generating sets as alternate source of power supply.

2.2.2 Sub-Project Planning

2.2.2.1 Planning and design must be consistent with the City Sanitation Plan/master plan/wastewater master plan and any other investment plans.

2.2.2.2 Selection of locations for major facilities such as Pumping stations and WWTPs must be done carefully to avoid likely litigation.

2.2.2.3 Wastewater system designs should be consistent with the water supply situation (to ensure adequate flows in the sewers).

2.2.2.4 Status of existing assets (e.g. sewerage networks) must be accounted for in planning and up-gradation, and must be included in the DPR if needed for proper functioning of the system.

2.2.2.5 Realistic timelines for each stage of preparation and implementation must be provided.

2.2.2.6 Linkages between different elements (house connections to sewers; sewers to pump stations and WWTP) must be examined to ensure that the system will function correctly and with adequate capacities at each stage.

2.2.2.7 A detailed Project Implementation Plan should be prepared for each DPR, appropriately supported by GANTT/CPM and/or PERT charts.

2.2.3 Sub-Project Costing

2.2.3.1 Updated and current Schedule of Rates should be used for rate analysis; market rates may be used for the items not available in the SoR.

2.2.3.2 Price and Physical contingencies should be considered as appropriate.

2.2.3.3 Allocations by categories such as Civil Works, Goods and Equipment, Consulting Services, Training, incremental operating costs etc. should be provided, in conformity with procurement guidelines.

2.2.3.4 O&M cost for the first 5 years will be capitalized, and approved for funding by the NGRBA Program as part of the project cost. The O&M cost of subsequent 10 years must be estimated and presented in the DPR, which is to be funded by the State Govt. / ULB from its own resources.

2.2.4 Financial Analysis

2.2.4.1 Sub-project capital cost will be shared as per agreed ratio between GoI and States including first 5 years O&M cost.

2.2.4.2 Adequate budget provisions from the State Government must be confirmed.

2.2.4.3 ULBs must present detailed O&M plan indicating likely revenue earning vis-à-vis O&M costs of assets for perspective years.

2.2.4.4 The first 5 years O&M costs are included in the project cost. The State Government will guarantee payment of the next 10 years O&M costs in case the ULB fails to do so.

2.2.5 *Economic Analysis*

2.2.5.1 Economic analysis must be conducted for all subprojects proposed to NGRBA for funding. The economic benefits must take into account benefits from both the river and the improved urban environment.

2.2.6 *Social Assessments and Communications*

2.2.6.1 Social assessments must be undertaken integrally with planning, technical and financial assessments.

2.2.6.2 Stakeholder engagement, outreach and communications must be undertaken in conjunction with each sub-project and in relation to specific issues (e.g. connecting to sewers, paying bills, reducing trash, etc.).

3 Criteria for Industrial Pollution Sub-projects

3.1 Eligibility Criteria

3.1.1 The sub-projects shall directly result in the reduction of industrial pollution load on the main stem of Ganga or its main tributaries. The reduction in industrial pollution load shall be measured in terms of reduction in BOD, COD and TDS levels in the main stem of the Ganga, before and after the discharge of industrial effluents in the river.

3.1.2 The sub-projects may consist of: (a) Common Effluent Treatment Plants (CETP); (b) Treatment, Storage and/or Disposal Facilities (TSDF) especially for common hazardous waste; (c) Innovative pilot projects on industrial pollution control technologies; and/or (d) Technical Assistance for the formation of Waste Minimization Circles and/or Clean Technologies.

3.1.3 The sub-project, including all its associated facilities, shall be fully owned and operated by member industries or private operators. The member industries or the private operator shall form a company under the Company's Act for implementing and operating the sub-projects.

3.1.4 The sub-projects shall be prioritized based on the pollution load of industrial effluents, number of participating industries, river flow, river water quality, specific site conditions and financial sustainability.

3.1.5 The capital cost of the sub-project shall include the cost of the associated facilities, including the cost of land, for setting up the facility. Financing pattern for the sub-projects shall be as follows: 25% as a grant from NGRBA, 25% as a grant from the State Government, and the remaining 50% to be borne by the participating industries and / or the private operator (either through own contribution or as loans through financial institutions). Financing is subject to satisfactory assessment of the cost estimates during appraisal stage.

- 3.1.6 Sub-projects proposed by member industries shall be commissioned on a DBO model with O&M costs capitalized for at least 5 years (or more) from the date of commissioning. O&M cost is the responsibility of the member industries.
- 3.1.7 The member industries should provide an undertaking to allow monitoring of the sub-project facilities/performance by third party for quality assurance as required by the NGRBA program.
- 3.1.8 Sub-projects proposed by private operators shall ensure commitment by the operator for the satisfactory operation of the facility.
- 3.1.9 To ensure good performance, the State Government shall provide its share of the finance (25%) as a loan, which may be converted to a grant if the sub-project performs satisfactorily for a period of 5 years.
- 3.1.10 The proposal should be based on informed consent of the member industries and the same shall be substantiated through suitable affidavit as well as the members' commitment to ensure satisfactory operation of the facility.
- 3.1.11 The sub-project should include a multi-party performance monitoring program comprising the designated citizen / professional groups, SPCB, member industries and CETP company representatives.
- 3.1.12 Sub-projects involving land acquisition will be sanctioned in two stages. "In Principle" approval based on the FR, to be followed by DPR approval once the required steps in land acquisition process are completed.
- 3.1.13 Immediately after FR approval and in parallel with DPR preparation, the Industries Association would initiate land acquisition process for the project. This would facilitate identification of the land, its survey and preliminary cost estimation so that the State Govt. is in readiness to issue the appropriate notification under prevalent LA Act upon approval of DPR for speedy acquisition of the land.
- 3.1.14 The sub-projects, wherever feasible, should explore the option of tapping carbon credits with suitable mechanisms for minimizing green house gas emissions. The DPRs must present (in the required format) the potential for carbon credits generation.

3.2 Appraisal Criteria

3.2.1 *Technical standards of preparation*

- 3.2.1.1 The sub-projects shall be designed based on available guidelines/manuals/rules of national and international agencies, including MoEF, CPCB, and USEPA, and the treated effluent shall comply with the relevant disposal standards in India.
- 3.2.1.2 Sub-projects shall be designed for a period of 30 years for civil works and 15 years for E&M equipment. The designs shall also consider future scenarios including expansion of existing industries.
- 3.2.1.3 All the designs shall be based on inventory of participating industries, detailed engineering surveys (topographic surveys, etc.), site investigations

(soil sampling, etc.), and shall comply with the requirements of relevant codes / standards (BIS, IRC, etc.).

- 3.2.1.4 The DPR should consider the overall industrial waste generated by the member units and shall be based on individual industry specific waste quantification and characterization studies and waste minimization studies / audits aimed at implementing cleaner production practices.
- 3.2.1.5 The technology chosen for the sub-project shall be the one with lowest lifecycle cost, that is proven to be suitable for local conditions and which provides required degree of treatment. The DPR and the bid documents shall provide the key parameters adopted for the arriving the life cycle cost.
- 3.2.1.6 The technologies to be adopted in the sub-projects shall have all regulatory and environmental clearances.
- 3.2.1.7 The design should include adequate and reliable alternate power supply arrangements to ensure satisfactory performance of the facility.
- 3.2.1.8 The sub-project should include a suitable sludge/residue management strategy which ensures in situ treatment of sludge and subsequent safe disposal either at the site or at an approved TSDF facility.
- 3.2.1.9 The CETPs shall be designed based on detailed studies on the quantity and characteristics of the industrial effluents, as well as on waste minimization studies and audits.
 - 3.2.1.10 The technology proposed by the sub-project should consider the:
 - (i) mixed and variable characteristics of the industrial effluents of the respective member industries, (ii) life cycle cost (capital and O&M), (iii) land requirements, (iv) power requirements, (v) sludge / residue management, (vi) ease of operation, (vii) flexibility for future expansion / upgradation, and (viii) Net GHG emissions, etc.
- 3.2.1.11 The CETP sub-projects should include facilities for common recovery units (chrome recovery, etc) and/or treated effluent reuse and management of sludge/residue management (including collection, transportation, treatment and disposal of sludge generated from the pre-treatment facilities of the member industries) from the facilities.

3.2.2 ***Sub-Project Planning***

- 3.2.2.1 The sub-project planning and design shall be consistent with the industrial and environmental policies/directives of GoI and the respective states.
- 3.2.2.2 The location of CETPs shall be based on environmental and social considerations and shall comply with the site selection guide lines of CPCB or the State PCB.
- 3.2.2.3 The experience of similar projects (CETPs) in the region/country shall be considered while designing the sub-project.
- 3.2.2.4 The sub-project preparation and implementation time lines shall be realistic and shall consider all the aspects of mobilization of participating industries, initial assessment studies, and technological limitations during

construction, etc. and shall provide clear implementation plan through suitable CPM / PERT Charts.

3.2.2.5 The sub-projects shall include the provisions for future expansion and also developments on a modular basis.

3.2.2.6 The sub-projects should include detailed costs for the collection and transportation of waste from the participating industries to the CETP.

3.2.2.7 Proposals should provide details on critical aspects, such as: (i) details of member industries, (ii) pre-treatment requirements for member industries (not to be included in the capital cost of the sub-project, but borne by member industries), (iii) commitment by the member industries for setting up pre-treatment facilities, (iv) proposed facilities for the conveyance of effluent to the CETP, (v) details of user charges, etc.

3.2.3 *Sub-Project Costing*

3.2.3.1 Updated and current Schedule of Rates (SoR) to be used for rate analysis and market rates may be used for the items not available in the SoR.

3.2.3.2 Inflation and contingencies shall be considered as normally followed by the respective state governments, in similar projects.

3.2.3.3 Various items of the sub-projects shall be categorized as Civil works, Good and Equipment, Consulting Services, Training, incremental operating costs etc, as per the NGRBA Procurement Manual.

3.2.3.4 Proposals should provide the details of cost apportionment among the participating industries, for contribution, recurring and O&M costs of the proposed facilities. The mechanism for this cost apportionment along with provisions for cost escalation shall also be provided.

3.2.3.5 The sub-project contract document shall be structured suitably to ensure that the O&M costs are capitalized into the cost and a minimum of 5 years O&M is ensured by the contractor.

3.2.4 *Financial Analysis*

3.2.4.1 The sub-project capital cost shall be shared as per the ratios indicated in section 3.1.5 of this frame work.

3.2.4.2 Adequate budget provisions by GoI, State Government and the agency developing the sub-project shall be ensured and confirmed, prior to approval of the sub-project.

3.2.4.3 The project development agency shall provide a detailed O&M plan indicating likely revenue earning vis-à-vis O&M costs of assets for lifetime operation (or at least 15 years).

3.2.4.4 The sub-project should also present the agreed strategy to ensure financial sustainability of the facility.

3.2.5 *Economic Analysis*

3.2.5.1 The sub-project should include a detailed economic analysis that provides information of the benefits of the project to the community at large and the

river in particular. The analysis shall consider factors such as positive health impacts as a result of environmental improvement of the city/town, economic benefit in terms of employment generation, higher productivity, etc.

3.2.6 *Social Assessments and Communications*

3.2.6.1 This aspect shall be integrated with planning, technical and financial assessments of the sub-project.

3.2.6.2 The sub-project shall include an assessment of ‘willingness to pay’ by the participating industries for developing the CETP and its regular operation.

4 Criteria for Solid Waste Management Sub-projects

4.1 Eligibility Criteria

4.1.1 Sub projects would be selected and prioritized on the basis of the following factors: (i) unorganized waste disposal sites on the river banks; (ii) religious, historical and archeological sites of importance with poor solid waste management; (iii) slums and small settlements along the river without formal waste collection and transportation; (iv) small towns along the river without adequate solid waste management systems; and (v) rehabilitation and remediation of existing disposal sites along the river.

4.1.2 Any new facility/sub-project should be fully integrated with the existing components of the city-level solid waste management system (including primary collection, secondary collection points, segregation at source and pre-processing stage, transfer stations, landfills, recycling and reuse, treatment and processing, rehabilitation and remediation of existing landfill sites).

4.1.3 All sub-projects addressing the above issues and with significant O&M needs, such as collection & transportation, landfill, and waste processing, should be commissioned with long-term (at least 15 years) O&M contracts (DBO or other models).

4.1.4 Performance Bank guarantees should be provided by the selected operator for the specified period of O&M. Or else, a suitable Terms of Payment for the overall package should be worked out covering payments during the entire O&M period.

4.1.5 Technology selection will be on lowest lifecycle cost basis, calculated for local conditions and required degree of recycling, treatment and processing. The bid documents will provide the key parameters for this calculation, including specific details, such as physico-chemical characteristics of waste, equipment and energy prices, and land and manpower prices.

4.1.6 Informed consent of the ULB will be required, in the form of council resolution for providing O&M for sub-project as well as its eventual ownership, if applicable.

4.1.7 DPRs should be based on existing city solid waste management plans or a City Sanitation Plan.

- 4.1.8 The ULB should provide an undertaking to allow monitoring of the sub-project facilities/performance by third party for quality assurance as required by the NGRBA program.
- 4.1.9 As part of their consent/approval of the DPR submitted to NGRBA program for funding, the relevant ULBs may engage in the ULB capacity building program, aimed at strengthening the technical, financial and management capacity of the ULB. ULB will undertake to provide requisite staff, office space, logistics support, for successful implementation of the agreed capacity-building activities.
- 4.1.10 Community participation and consultations should be ensured in the process of FR/DPR preparation.
- 4.1.11 Sub-projects comprising component of land acquisition will be accorded sanction at two stages. “In Principle” approval will be obtained first, on the basis of the FR, and will be followed by DPR approval once the required steps in the land acquisition process are completed.
- 4.1.12 Immediately after FR approval and in parallel with DPR preparation, the EA along with the ULB would initiate land acquisition process for the project. This would facilitate identification of the land, its survey and preliminary cost estimation so that the State Govt. is in readiness to issue the appropriate notification under prevalent LA Act upon approval of DPR for speedy acquisition of the land.
- 4.1.13 The FR should assess whether the sub-project has the potential for greenhouse gas (GHG) reduction. The DPR should provide an estimate of this reduction and its design implications.

4.2 Appraisal Criteria

4.2.1 *Technical Standards of Preparation*

- 4.2.1.1 Preparation should be based on a suitable design period for each kind of asset based on forecasts of: population, water use/supply, and wastewater quantity and quality. These assumptions must be suitably validated.
- 4.2.1.2 Project formulation should be based on detailed field surveys as appropriate, including comprehensive waste quantification surveys, site investigations, and proximity analysis.
- 4.2.1.3 Sub-projects should be in conformity with the Municipal Solid Waste Management (Rules) 2000, and the SWM Manual published by CPHEEO, MoUD.
- 4.2.1.4 Technology selection for waste treatment should be on lowest lifecycle cost basis, calculated for local conditions and required degree and type of treatment. The bid documents should provide the key parameters for this calculation, including site specific details, e.g. waste physico-chemical characteristics, equipment and energy prices, and land and manpower prices. Detailed analysis of type of waste and its physico-chemical characterization should be carried out in order to identify the choice of processing technology (such as composting, waste-to-energy).

4.2.1.5 Integrated waste management strategy should be developed for small towns and for augmentation in cities, if required.

4.2.1.6 The possibility of covering isolated residential pockets and slums through decentralized transportation system should be explored based on techno-economic considerations.

4.2.1.7 Sub-projects should include suitable provisions for improving the working conditions and/or rehabilitation of local community workers (e.g. scavengers, rag pickers, and recyclers).

4.2.2 *Sub-Project Planning*

4.2.2.1 Sub-project planning and design should be consistent with the City Sanitation Plan or other master/investment plan being provided.

4.2.2.2 A detailed Project Implementation Plan supported by GANNT/CPM and/or PERT Charts should be included.

4.2.3 *Sub-Project Costing*

4.2.3.1 Updated and current Schedule of Rates should be used for rate analysis and market rates may be used for the items not available in the SoR.

4.2.3.2 Price inflation and physical contingencies should be considered as applicable.

4.2.4 *Financial Analysis*

4.2.4.1 The ULB will need to draw up detailed O&M plan indicating likely revenue earning vis-à-vis O&M costs of assets for lifetime operation (or at least 15 years).

4.2.4.2 The sub-project should also present a strategy to ensure financial sustainability of the facility.

4.2.5 *Economic Analysis*

4.2.5.1 The sub-project should include a detailed economic analysis that provides information of the benefits of the project to the community at large and the river in particular. The analysis shall consider factors such as positive health impacts as a result of environmental improvement of the city/town, economic benefit in terms of employment generation, higher productivity, etc.

4.2.6 *Social Assessments and Communications*

4.2.6.1 Social assessments should be undertaken integrally with planning, technical and financial assessments. Stakeholder engagement, outreach and communications should be undertaken in conjunction with each sub-project and in relation to specific issues (e.g. paying bills, reducing waste, total sanitation, etc.).

4.2.6.2 Contingent Valuation Method (CVM) may be adopted for beneficiary assessments.

5 Criteria for River Front Management Sub-projects

5.1 Eligibility Criteria

- 5.1.1 Three types of sub-projects will be considered eligible for funding under the riverfront management (RFM) sector: (i) comprehensive and integrated Area Development Plans (ADPs); (ii) the construction or improvement of crematoria; and (iii) the conservation and preservation of ecologically sensitive areas. ADP sub-projects are expected to be in the majority under the NGRBA Program.
- 5.1.2 ADP sub-projects should be taken up in reasonably long stretch of ghats. However, the ghats portion may be limited in length to the optimal and historical use of the river. In case of smaller ghats, the sub-project may still be eligible if a justifiable case is made for its cultural, historical, religious, economic or recreational importance.
- 5.1.3 ADP sub-projects should be reasonably comprehensive and integrated, and should consider all facets of area development, including urban planning, architecture and the built environment, culture and heritage, religious practices, historical and archeological sites, social and environmental improvements like properly managed public toilets and solid waste management, development of ghats for bathing and religious rites, recreational uses, and local economic development, including the impact of proposed activities on the livelihoods of local residents/users of the river.
- 5.1.4 Crematoria sub-projects should propose either the construction of one or more new facilities, or the improvement of existing ones. Proposals should clearly justify the local need and demand for these facilities and include a plan for their sustainability.
- 5.1.5 Conservation and preservation sub-projects should: (i) focus solely on ecologically sensitive stretches of the river prone to resource degradation; (ii) demonstrate how conservation and preservation of the stretch's ecology and biodiversity will be achieved; and (iii) include specific knowledge generation, communications, and public awareness activities.
- 5.1.6 All sub-projects should: (i) show adequate demand for the proposed improvements; (ii) explain the social, environmental and economic impacts of the works and activities proposed; and (iii) demonstrate sustainability, including for operations and maintenance.
- 5.1.7 Sustainable revenue generating activities are encouraged, including activities which can generate revenue from sustainable tourism. Revenue generation can be through ring-fenced activities in the sub-project (e.g. user charges for a walkway or park, or rent from kiosks) or through other schemes in the city (e.g. local tourism charges or city luxury tax). Public Private Partnership (PPP) models for design, construction, and operation of facilities are to be encouraged.
- 5.1.8 Sub-projects with engineering works - such as embankment development for river channeling - that affect the hydraulics of the river are not eligible. Engineering works are eligible provided the proposal demonstrates they will not interfere with the hydraulics of the river.

- 5.1.9 Sub-projects should be prepared in consultation with local stakeholders, including elected members of the ULB, citizens groups, businesses, religious leaders, temple trusts, CBOs and NGOs. Stakeholders should be encouraged to participate in the design and planning process, and their views should be reflected in the FR and DPR.
- 5.1.10 Priority will be given to ADP sub-projects, and to those located in areas of greatest need, defined as: (i) places of mass congregation; (ii) places of point source pollution, including solid waste dumping; (iii) places of cultural, historical, religious, economic or recreational importance; (iv) places that have become derelict and where their enhancement would improve the quality of life and economic activity in the area; and (v) places of high environmental and ecological value.
- 5.1.11 Proposals should avoid areas of disputed land tenure, although such areas will be considered with clear proposals for early resolution. Priority will be given to sub-projects that avoid land acquisition altogether and/or can obtain land through donation. In case land acquisition is unavoidable, immediately after FR approval and in parallel with DPR preparation, the EA along with the ULB would initiate land acquisition process for the project. This would facilitate identification of the land, its survey and preliminary cost estimation so that the State Govt. is in readiness to issue the appropriate notification under prevalent LA Act upon approval of DPR for speedy acquisition of the land.
- 5.1.12 Explicit and informed consent of ULB, as per the municipal laws, is required at the time of submission of FR as well as of DPR. The consent should indicate recognition of the nature, scale, and cost of the investment, especially the projected O&M costs; and the roles and responsibilities of the ULB including an undertaking to own and manage the facilities and assets. FRs or DPRs without this consent will not be considered eligible.
- 5.1.13 The ULB should provide an undertaking to allow monitoring of the sub-project facilities/performance by third party for quality assurance as required by the NGRBA program.
- 5.1.14** As part of their consent/approval of the DPR submitted to NGRBA program for funding, the relevant ULBs may engage in the ULB capacity building program, aimed at strengthening the technical, financial and management capacity of the ULB. ULB will undertake to provide requisite staff, office space, logistics support, for successful implementation of the agreed capacity-building activities.
- 5.1.15 All legal and statutory approvals needed should be obtained and submitted with the DPR, including from Port Authorities, Waterways Departments, and Irrigation Departments as may be required.

5.2 Appraisal Criteria

- 5.2.1 The DPR should examine and consider all existing plans that have a bearing on the sub-project, such as City Sanitation Plans, master plans, development plans, cultural site development plans, and regional development plans. Plans previously prepared by local citizens groups should also be consulted.

- 5.2.2 The DPR should be prepared in accordance with the NGRBA Program framework, and include explicit assessments of the social, economic, environmental, cultural, historical and religious aspects of the project. The DPR should also carefully assess the particular physical and safety issues associated with RFM sub-projects, such as river flow, flooding risks, drowning risks, and crowd management.
- 5.2.3 The DPR should include a detailed economic analysis that provides information on the benefits of the sub-project to the community at large and to the river in particular.
- 5.2.4 The DPR should demonstrate that the design does not disturb the natural ecology, habitats, forests, mud-flats, river hydraulics and flows due to any construction or sub-project activity. In sub-projects where the river front includes undisturbed environmentally sensitive habitats, forests, or natural landscapes, these should be preserved or conserved appropriately.
- 5.2.5 The O&M costs for the first 5 years may be included in the project cost. The O&M costs for the subsequent 10 years should also be estimated and presented in the DPR. The O&M costs should include basic cleaning and waste management for the proposed area.
- 5.2.6 The DPR should present an O&M plan, including the institutional and financial arrangements to manage and finance sub-project activities. The DPR should also include details of any proposed revenue generation, where applicable, and of the post-implementation management of the sub-project, including the roles and responsibilities of the State Government, the ULB, the Executing Agency, religious trusts, the private sector, and/or any other government or non-government stakeholder as appropriate.

FINANCIAL MANAGEMENT MANUAL

Table of Contents

SL. NO.	CHAPTER	PAGE NO
1	Introduction	30
2	Flow of Funds	32-33
3	Accounting & Financial Reporting	34-35
4	Audit Arrangements	36-38
5	World Bank Project & Disbursement	Annex-I

Chapter - 1
Introduction

1. River Ganga has significant economic, environmental, and cultural value in India. Rising in the Himalayas and flowing into the Bay of Bengal, the river traverses a course of more than 2,500 km through the plains of north and eastern India. The Ganga basin (which also extends into parts of Nepal, China and Bangladesh) accounts for about 26 percent of India's landmass, 30 percent of its water resources, and more than 40 percent of its population. In addition, Ganga is India's holiest river and has a cultural and spiritual significance that far transcends the boundaries of the basin.
2. Increasing population in the basin and haphazard urbanization and industrial growth has significantly impacted the water quality of River Ganga, particularly during the dry season. The primary sources of pollution are untreated sewage and industrial wastewater. Non-point pollution sources from religious activities at various locations along the river, agriculture and livestock as well as poor solid waste management also contributes to pollution. In addition, substantial abstraction of water, primarily for irrigation, has led to low flows and associated poor water quality in the critical middle stretches of the river.
3. The previous attempts to clean the river, such as Ganga Action Plan (GAP) launched in 1985 and a similar plan for Yamuna - the biggest tributary of Ganga (YAP), have provided some gains in arresting rate of water quality degradation, but lot more needs to be done.
4. Lessons from earlier experience indicate that improving water quality in the Ganga cannot be achieved by plugging the infrastructure gap alone. Any effective initiative will have to adopt a three-pronged approach by (i) establishing a basin-level multi-sectoral Guideline for addressing pollution in the river (ii) making relevant institutions operational and effective and (iii) implementing a phased program for Ganga clean-up.
5. As a major first step in this direction, Government of India (GOI) has established the National Ganga River Basin Authority (NGRBA) for the comprehensive management of the river. The NGRBA will adopt a river-basin approach and has been given a multi-sector mandate to address both water quantity and quality aspects. The NGRBA has resolved that by year 2020 no untreated municipal sewage or industrial effluent will be discharged into River Ganga.
6. The NGRBA will finance infrastructure investments to reduce pollution loads in priority locations on the river. The investments are intended to exemplify, among other attributes, the high standards of technical preparation and implementation, sustainability of operations, and public participation envisaged in the NGRBA Guideline.

The majority of investments in the NGRB project are expected to be in the wastewater sector, particularly in wastewater treatment plants and sewerage networks. Investments will also be supported in industrial pollution control and prevention (e.g. common effluent treatment plants), solid waste management (e.g. collection, transport and disposal systems), and river front management (e.g. improvement of the built environment along river stretches, improvement of small ghats and electric crematoria, and the conservation and preservation of ecologically sensitive sites). Many investments are likely to combine elements of more than one of these sectors.

7. An investment Guideline has been finalised for selection of project investments. The objectives of this investments Guideline are to:
 - a) provide a filter for all the NGRBA investments, for ensuring that the selected investments are well-prepared and amongst the most effective in reducing the pollution loads;
 - b) make transparent the decision-making process on investments selection; and
 - c) ensure that the investments are implemented in a sustainable manner.

PMG/ SPMG Structure and staffing

The process of setting up the NMCG (National Mission Clean Ganga) as registered society at centre level & SPMGs by respective state Govt. is currently underway. Relevant details of constitution (MOA/registration, bylaws, mandate, composition, function, powers and operational procedures) are being finalised.

Chapter – 2
Flow of Funds

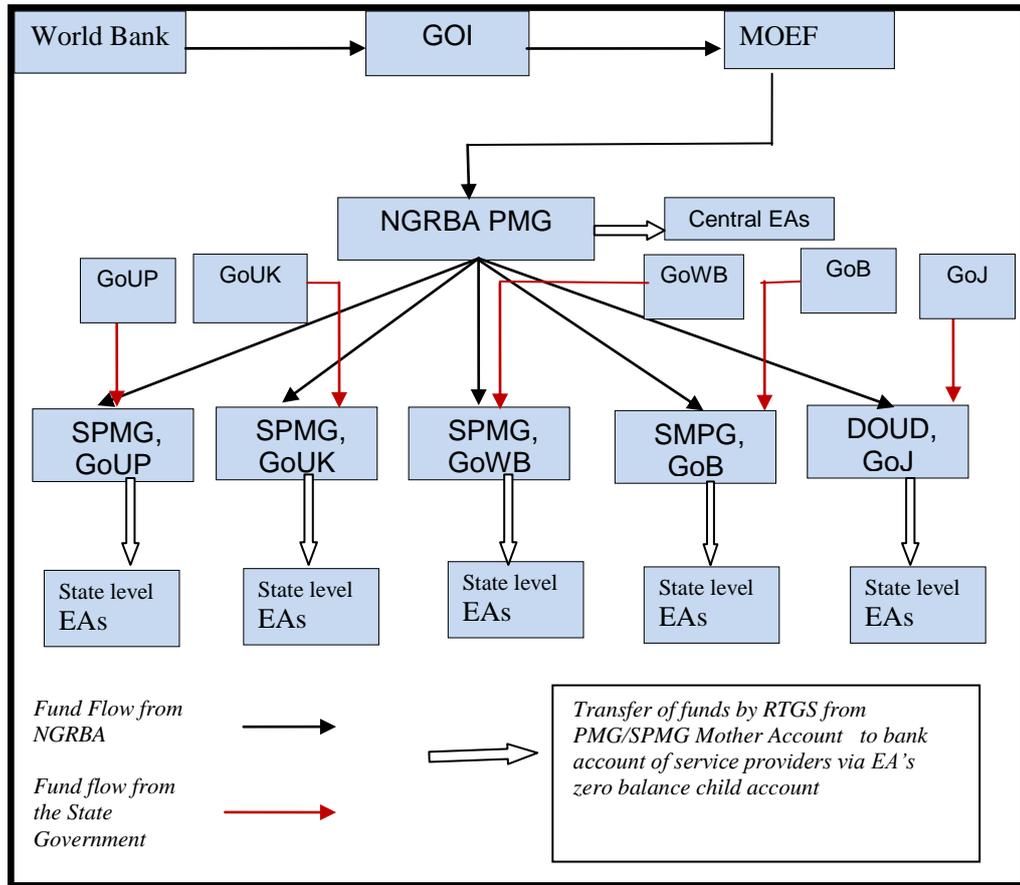
Fund Flow Design

1. The budget for NGRBA will be provided for in the Demands for Grants for Union Ministry of Environment & Forest (MOEF). The project funds will be budgeted as a separate budget line under NGRBA. The PMG will receive funds from the MoEF budget in an earmarked project bank account. The PMG will transfer funds to the SPMGs on half-yearly basis, for implementation of the agreed annual action plan. These transfers will be made in May and November. The PMG will release the November instalment to each SPMG only when (i) the SPMG has submitted its Audit Report of previous financial year to the PMG and (ii) on reasonable utilisation of the first instalment of the reporting year. The State Government will release its share of funds to the SPMG within two months of receipt of the instalment from the PMG.

2. In order to streamline the arrangements, funds will flow only up to the level of the SPMG, which will have a project bank account (the “mother account”) where funds received from the PMG and from the states, will be held (see Figure 1). Each EA will have a sub-project specific zero balance bank account (the “child account”) in the same bank. However, separate bank accounts will be operated for WB Project & projects financed from other sources in PMG & SPMGs. The EA will have the authority to issue payment instructions to pay contractors/ suppliers for undertaking project activities within the scope of the approved annual action plan. The SPMGs Bank will then transfer required funds from the mother account to the child account of the EA, which will in turn transfer funds to the suppliers’/contractors’ account on the same date. This transfer of funds will happen through Real Time Gross Settlement (RTGS). Thus at the end of any given day, the EA child account will always have a zero balance. Through a sub-project specific payment system, it will be ensured that the payments from the EA do not exceed the annual amount sanctioned for the EA for the particular sub-project. Similar arrangements will also be made for fund flows between the PMG and the EAs at the central level. In case of Jharkhand, a bank Account will be opened by the Urban Development Department where funds from the Centre and State will be held. Fund flows between the UDD and the EAs will be similar to the fund flow arrangements between SPMGs and EAs in the other four States.

3. For payments to EAs for costs incurred for doing Feasibility Reports and DPRs or for incremental operating costs, payments can be made by the SPMG to the entity bank account of the EAs (not the child account as this is a zero balance account. If they want the payment can be routed through this account but the funds cannot be held in this account).

Figure 1: Fund Flow Diagram



Chapter – 3
Accounting & Financial reporting

Accounting System

- (i) A sound financial management system should clearly define the accounting policies and procedures to be adopted by all the program authorities. The accounts and financial statements prepared should be in accordance with the generally accepted accounting principles and procedures in India. This would also ensure comparability across accounting units/implementing agencies, for effective monitoring and implementation of the project.
- (ii) The above-mentioned fund flow design will also make possible accounting of all central and state level expenditures by the PMG and SPMGs. Program accounts will be maintained by using an off-the shelf accounting package Tally. However, separate books of account will be maintained by PMG/SPMGs for WB project & other projects. All Program activities will use double-entry accrual based accounting system. Each EA will submit to PMG/SPMG by the 10th of every month the following :
 - Invoices of suppliers/contractors against which online payment instructions have been issued by the EA in the previous month. These invoices will be accompanied by a covering letter giving the Name of the Subproject, Name of the Contractor, Invoice No., Invoice Date, Gross Amount, Deductions, and net amount of payments made (Standard format is being prepared).
 - A list of invoices received and not paid during the previous month.

Each EA will submit contract-wise the expenditure incurred in previous month, based on which the SPMG will write the books of accounts for expenditures at the level of EAs as well as the level of SPMG. The chart of accounts will be designed in a manner to be able to give EA wise, subproject wise as well as contract-wise and contractor-wise the financial information. Based on the EA's monthly submission, the TDS can also be paid for by the concerned SPMG.

Accounting Centers

The accounting centers are the offices where the basic accounting in respect of expenditure on the program activities shall be carried out. These accounting centers shall be responsible for maintaining the relevant books of account and shall account for all the financial transactions entered into by each of them.

The accounting centres for the program shall be as follows :

Name of A/c centre	level	Nos.	IUFRs to be submitted to	Frequency of submission of IUFRs
PMG	Central	1	MOEF	As & when required
SPMG Bihar	State	1	PMG	Quarterly
SPMG Jharkhand	State	1	PMG	Quarterly
SPMG Uttar Pradesh (U.P.)	State	1	PMG	Quarterly
SPMG Uttarakhand	State	1	PMG	Quarterly
SPMG West Bengal	State	1	PMG	Quarterly
Total		6		

Account Heads

A uniform chart of accounts will be developed for PMG and the SPMGs in consultation with the SPMGs.

Books of Accounts to be maintained by PMG & SPMG

The following primary books of accounts and registers shall be prepared and maintained by PMG and each SPMG:-

- Cash Book
- General Ledger/Subsidiary ledgers (including subsidiary ledgers relating to advances and contractors)
- Journal Register
- Fixed Assets Register
- Register of Cheques & Bank drafts received and remitted to Bank
- Cheque issue Register
- Guarantee Register
- Bank Pass Book
- Register of bank drafts dispatched
- Bill Register
- Dispatch Register
- File Register

Any other books and accounts, which may be considered for the day-to-day work of the program, shall also be maintained if required.

At PMG and SPMG, the books of accounts should be maintained in the standard format as available in Tally software. EAs are not required to maintain project accounts. EAs will furnish monthly information in standard formats based on which accounts will be maintained by the concerned SPMG.

Each accounting unit will generate a monthly trial and IUFRs. This will facilitate timely preparation of the quarterly IUFRs. At the close of each quarter, each SPMG will submit to PMG within 30 days from the end of the quarter an IUFR/expenditure report in pre-agreed formats (which will also include financial information pertaining to EAs in the respective State).

Chapter -4
Audit Arrangements

(A) Internal audit

The PMG and each SPMG will hire private firms of chartered accountants as internal auditors to assess effectiveness of internal controls and to provide independent assurance on the adequacy of internal controls to mitigate financial risks in the Program. However, the PMG plans to set up its own internal audit unit within two years of the Project. Once the internal audit unit of the PMG has been established with adequate numbers of appropriately qualified full time staff to conduct quarterly internal audits in PMG and SPMGs, the project's internal audit function could be entrusted to this unit.

Scope:

Internal audit should play a role in assisting management in bringing a systematic, disciplined approach to evaluate and improve the effectiveness of the internal control system. In conducting the audit, special attention should be paid to assessing whether adequate controls have been established and complied with to ensure:

- (a) All project funds have been used in accordance with the conditions of the relevant legal agreements and only for the purposes for which the financing was provided;
- (b) Project assets are adequately safeguarded and used solely for their intended purposes; and
- (c) All necessary supporting documents, records, and accounts have been kept in respect of all project transactions; including expenditures reported quarterly Expenditure Report.
- (d) Procurements for the Project have been done in accordance with the agreed Procurement procedures

Objective

The objective of internal audit is to review the operations by specially assigned staff to ensure that implementing entity's internal control systems are operating satisfactorily. Internal audit will provide project management with timely information, on the financial management aspects to enable the management to take corrective actions, wherever necessary. Auditor would suggest methods for improving weak controls or for creating them where there are none.

Coverage

The internal audit will include such tests and controls which it considers necessary under the circumstances. Specific areas of coverage of the internal audit will include the following:

- An assessment of the effectiveness and compliance with the financial controls laid down in the FM and Procurement Manuals. Whether funds have been used with due regard to economy, efficiency and effectiveness and for the purposes they were provided.
- Whether realistic annual work plans and procurement plans are prepared and expenditures are incurred as per approved plans and variances if any are monitored, analyzed and the learning used for preparing plans for subsequent years.
- Timeliness of flow funds to the spending units.
- Whether the selection criteria as laid down in the FM Manual have been assessed by SPMGs and complied with in selection of EAs.
- Whether there is appropriate documentation of check measurement of works by the Executive Engineer and inspections of works by an authority one level higher in the organizational structure of the EA as agreed and documented by SPMG;
- Whether contract payments have been made as per the terms of the contract. In doing so the auditors should consider the reports of the technical supervision consultants

- Whether an appropriate system of accounting and financial reporting exists by which expenditures are properly recorded and eligible expenditures are claimed from the Bank in a timely manner. Whether adequate supporting documentation is being maintained for all project expenditures
- That an adequate system is in place to ensure that goods, works and services are being procured in accordance with relevant financing agreements.
- Whether appropriate controls as laid down in the FM/Procurement Manual have been complied with for variation in contracts.
- Whether Bank balances are reconciled with the books by the PMG and the five SPMGs
- Anything else that the auditor considers pertinent.

Timing

The Internal Audit will be conducted on a quarterly basis. The audit would cover the entire program on a sample basis i.e., covering samples from all spending units namely PMG, SPMGs. However, the auditor will not cover all agencies every quarter. However, every State should be covered at least once a year. The auditor will draw up an audit plan for each quarter at the beginning of the financial year in consultation with the management. The audit plan should indicate sample coverage at each level of implementation of the PIA concerned. The sample selection would be based on an assessment of the risks applicable to the operation.

Reporting

At the State level, an Audit Committee will be formed & chaired by the Project Director, SPMG and having representation of participating EAs, ULBs and the State Finance Secretary or his designate, These Audit Committees will consider the key findings of both external and internal audits and monitor timely action on these findings by the implementing agencies.

Similarly an Audit Committee will be formed & chaired by Mission Director at the level of PMG.

The Internal Audit will provide a report to the program management highlighting findings within 45 days of the end of the quarter to enable the management to take timely corrective action. The quarterly internal audit report will be reviewed by the program Audit Committee which will ensure that actions are taken to resolve the audit issues in a timely manner. An action taken report can be submitted to the Bank on annual basis. One of the most serious concerns is that despite widespread knowledge of control weaknesses there is limited response from implementing agencies by way of timely remedial actions on the findings of audits.

(B) External Audit

A CA Firm will be appointed by PMG which will conduct the external audit of the program. The respective Auditor will be responsible for submitting to the PMG/SPMG annual audited consolidated financial statements of the program by July 31 every year. The PMG/ SPMGs will ensure that the auditors follow the agreed terms of engagement and the audit observations are satisfactorily dealt with in a timely manner. The term of reference of the external audit is given below:

Objective

The essence of the audit policy is to ensure that the program receives adequate independent, professional audit assurance that the funds were used for the purposes intended, that the annual financial statements are free from material misstatement. The objective of the audit of the Program Financial Statement (PFS) is to enable the auditor to express a professional opinion as to whether (1) the PFS present fairly, in all material respects, the sources and applications of program funds for the period under audit examination, (2) the funds were utilized for the purposes for which they were provided.

Standards

The audit will be carried out in accordance with the Auditing Standards issued by the Institute of Chartered Accountants of India. The auditor should accordingly consider materiality when planning and performing the audit to reduce audit risk to an acceptable level that is consistent with the objective of the audit. Although the responsibility for preventing irregularity, fraud, or the use of loan proceeds for purposes other than as defined in the legal agreement remains with the borrower, the audit should be planned so as to have a reasonable expectation of detecting material misstatements in the project financial statements.

Audit Report

An audit report on the project financial statements should be prepared in accordance with the Auditing Standards promulgated by the Institute of Chartered Accountants of India. Those standards require an audit opinion to be rendered related to the financial statements taken as a whole, indicating “unambiguously whether it is unqualified or qualified and, if the latter, whether it is qualified in certain respects or is adverse or a disclaimer of opinion.” The auditor should also submit two copies of the audited accounts and audit report to the PMG/SPMG as the case may be.

General

The auditor should be given access to any information relevant for the purposes of conducting the audit. This would normally include all legal documents, correspondence, and any other information associated with the project and deemed necessary by the auditor.

Chapter- 5

World Bank Project & Disbursement

Financial Management arrangements and procedures for the World Bank financed project are given at Annexure-I.

National Ganga River Basin Project
Project Financial Management Manual
(May 03, 2011)

Financed by World Bank
[Credit/Loan No.]

Project Management Group
National Ganga River Basin Authority
New Delhi

Table of Contents

S.No.	Chapter	Page No.
1	Budgeting	43-44
2	Fund Flow	45-46
3	Accounting and Financial Reporting	47-49
4	Disbursement & Eligible Expenditure	50-53
5	Internal Control Framework	54-55
6	Audit	56-62
7	Staffing	63
8	Appendices	64

The Financial Management Manual is meant to be a “*living document*” to be updated on the basis of implementation needs and experience on the ground. Any changes to this manual will need to be approved by the PMG and the World Bank. This document is meant for the financial management staff of the National Ganga River Basin Project and others involved in the Project. For a complete understanding of the financial management arrangements in the Project, this document should be read in conjunction with the Financing Agreement, the Project Agreement, the Minutes of Negotiation, and the Project Operations Manual including the Procurement Manual.

Chapter – 1

Budgeting

Introduction

Preparation of proper budget plays an important role in timely implementation of any project. Budgeting involves quantifying the financial costs of undertaking specific tasks/objectives planned for the project to be achieved in a given timeframe. Before seeking funds from Government of India, the participating Basin States must estimate funds required for accomplishment of the project. It would be mandatory on the part of the Centre/State to make sufficient provision in their own budget for meeting the expenditure to be incurred under the scheme. The project's financial planning process for each financial year will follow the budgeting cycle of the Central/State Governments i.e. April to March and will be completed when the project estimates are included in the State and Central Government's Budget, presented to and approved by the relevant Legislature.

The project will be budgeted as a separate line in MoEF/respective State Government's Budget and the budgetary funds will be released under Demand for Grants. The Project budget for each financial year will grow out of the Annual Work Plan of the PMG/SPMG and EA s of the five participating States. The planning process of each implementing entity will follow a "bottom-up" approach i.e. it will start from EA's, then get consolidated at the State level and finally the AAP's of the SPMGs will get consolidated at the PMG level along with the AWP of the PMG. In the States, adequate consultation should be held at the level of SPMG with all spending units to finalise the project budget for the State.

Budget will be prepared based on the Annual Action Plan as detailed in the Chapter on "Annual Planning" of the Implementation Arrangements of the Program.

It should be borne in mind that the cost table prepared at the time of project preparation is the best estimation at the time it is prepared. But it may undergo revision during implementation based on the ground realities and implementation needs.

Within the overall expenditure approved by the CCEA, outlay for individual investments (sub-projects) will be approved by the Competent Authority (Secretary, Ministry of Environment & Forests or the Empowered Steering Committee of NGRBA and Union Minister of Environment & Forests, Union Finance Minister, CCEA as the case may be). However, for any expansion in the scope of the approved sub-project or increase in expenditure, revised DPR will need to be submitted again for seeking approval of the Competent Authority.

Though the B.E. is planned meticulously, in practice due to various reasons there may be a necessity for revision of the B.E. Every quarter a thorough review of budget should be undertaken by Implementing Agency vis-à-vis the actual progress and necessary actions should be initiated for revisions/ reallocation of funds, wherever necessary, for effective implementation of the project.

During the process of preparation of budget estimates, the following points need to be considered:-

- Budgets should be linked with the work plan/physical targets/procurement Plan.
- Any variation in the budget with the actual should be analyzed and reasons for adverse variation should be analysed and considered for corrective measures/future budgeting.
- The PMG/SPPMG of each Implementing state should have a Budget Review Committee consisting of heads of Engineering, Finance, Procurement, Monitoring, etc. This committee should review the various aspects of the budget and submit its quarterly observations to Head of the PMG/SPMG as part of project MIS.
- The Annual Action Plans should be in tune with the procurement Plans.

Chapter – 2

Flow of Funds

Fund Flow Design

3. The budget for NGRBA will be provided for in the Demands for Grants for Union Ministry of Environment & Forest (MOEF). The project funds will be budgeted as a separate budget line under NGRBA. The PMG will have budget line under NGRBA budget, and a separate budget classification for the specific Bank financed project. The PMG will receive NGRBA funds from the MoEF budget in an earmarked project bank account. The PMG will transfer funds to the SPMGs on half-yearly basis, for implementation of the agreed annual action plan. These transfers will be made in May and November. The PMG will release the November instalment to each SPMG only when (i) the SPMG has submitted its Audit Report of previous financial year to the PMG and (ii) on reasonable utilisation of the first instalment of the reporting year. The State Government will release its share of funds to the SPMG within two months of receipt of the instalment from the PMG.

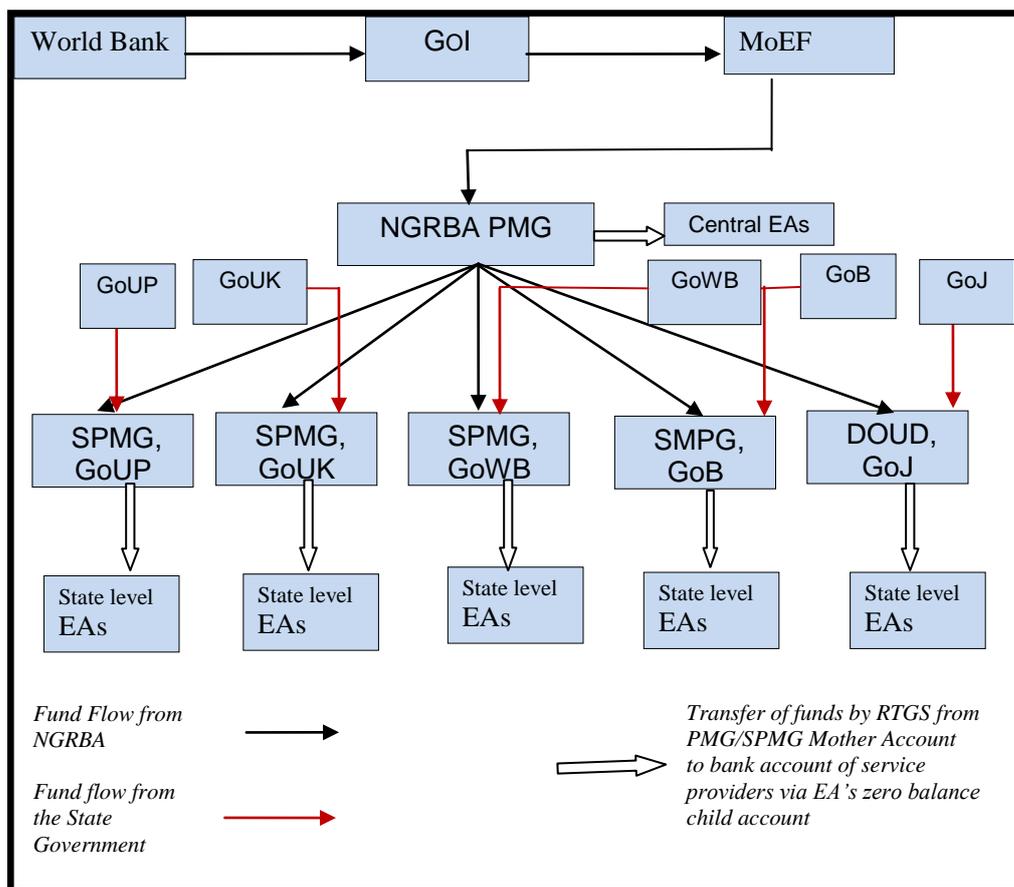
4. In order to streamline the arrangements, funds will flow only down to the level of the SPMG, which will have a project bank account (the “mother account”) where funds received from the PMG, and from the states¹, will be held (see Figure 1). Each EA will have a sub-project specific zero balance bank account (the “child account”) in the same bank. The EA will have the authority to issue payment instructions to pay contractors/suppliers/service providers for undertaking project activities within the scope of the approved annual action plan. Through a sub-project specific payment system, the SPMG Banker will ensure that the payments from an EA bank account do not exceed the annual amount sanctioned for that EA for the particular sub-project. As soon as a payment instruction is issued by the EA to its banker, the banker will check compliance with the ceiling as mentioned above and then draw the required funds from the SPMG mother account and transfer the same to the suppliers/contractors/service providers’ account on the same date. This transfer of funds from the mother account to the supplier/contractor/service provider account will happen through Real Time Gross Settlement (RTGS)². Thus at the end of any given day, the EA child account will always have a zero balance. Similar arrangements will also be made for fund flows between the PMG and the EAs at the central level.

In case of Jharkhand, a PLA Account/separate bank account will be opened by the Urban Development Department where funds from the Centre and State will be held. Fund Flows between the UDD and the EAs will be similar to the fund flow arrangements between SPMGs and EAs in the other four States.

² RTGS is a funds transfer system where money is moved from one bank to another in ‘real-time’, and on gross basis. When using the banking method, RTGS is the fastest possible way to transfer money. ‘Real-time’ means that the payment transaction isn’t subject to any waiting period. The transaction will be completed as soon as the processing is done, and gross settlement means that the money transfer is completed on a one to one basis without clustering with another transaction.

For payments to EAs for costs incurred for doing Feasibility Reports and DPRs (where done by the EA itself) or for incremental operating costs, payments can be made by the SPMG to the entity bank account of the EAs (not the child account as this is a zero balance account. (The payment can be routed through but not held in this child account). Details about these payments are provided in Chapter 4 on “Disbursements and Expenditures eligible for Bank Financing”

Figure 1: Fund Flow Diagram



Chapter – 3

Financial reporting & Significant Accounting Policies

Accounting System

1. The success of any project to a great extent depends on its financial discipline and its accountability for the funds provided. Accounting plays crucial role in directing and guiding the project to its goals and objectives. A sound accounting and reporting system informs the management of the financial progress in implementation and reflects the variations from planned goals and alarms the organization of any major changes or adverse situations so that corrective action is taken.
2. The accounts and financial statements prepared should be in accordance with generally accepted accounting principles in India and significant accounting policies documented in this Chapter. This would also ensure comparability across accounting units/implementing agencies, for effective monitoring and implementation of the project. The fund flow design of the Project will make possible accounting of all central and state level expenditures by the PMG and SPMGs respectively. Central and State level EAs are not required to maintain project accounts. EAs will furnish monthly information in standard formats based on which accounts will be maintained by the concerned SPMG & the PMG respectively.
3. Each EA will submit to PMG/SPMG, by the 10th of every month, the following:
 - (iii) Invoices of suppliers/contractors against which online payment instructions have been issued by the EA in the previous month. These invoices will be accompanied by a covering letter giving the Name of the Subproject, Name of the Contractor, Invoice No., Invoice Date, Gross Amount, Deductions, and net amount of payments made (Standard format is being prepared).
 - (iv) A list of invoices received and not paid during the previous month (Standard format is being prepared).
 - (v) A list of contracts signed during the previous month (Standard format is being prepared)
4. Based on the above-mentioned submissions by EAs, the PMG and SPMG will write the books of accounts for expenditures at the level of Central/State EAs together with its own. The chart of accounts will be designed in a manner to be able to give EA wise, subproject wise contract-wise and contractor-wise financial information. Based on the EA's monthly submission, the TDS can also be paid for by the concerned SPMG.
5. Project accounts will be maintained by using an off-the shelf accounting package, Tally (version to be inserted later). The project accounts will be maintained using double-entry accrual based accounting system.

6. Each SPMG will submit quarterly Interim Unaudited Financial Reports (IUF Rs) to the PMG. The PMG will consolidate the IUF Rs received from the five accounting units along with its own, and submit a quarterly consolidated IUF R to the Bank within 60 days from the end of each quarter. Once the IUF R is approved by the Bank, the PMG will submit consolidated reimbursement requests to the Bank through CAAA for the entire project based on the consolidated IUF Rs.

Accounting Centre's

The accounting centres are the offices where the accounting for the financial transactions of the project activities shall be carried out. These accounting centres shall be responsible for maintaining the relevant books of account for of the project. The accounting centres for the project shall be as follows :

Name of Accounting centre	Level	Nos.	Consolidation	Units to be Consolidated	IUF Rs to be submitted to	Frequency of submission of IUF Rs
PMG	Centre	1	Yes	Five SPMGs	World Bank	Quarterly
SPMG Bihar	State	1	Not Applicable		PMG	Quarterly
SPMG Jharkhand	State	1	Not Applicable		PMG	Quarterly
SPMG Uttar Pradesh (U.P.)	State	1	Not Applicable		PMG	Quarterly
SPMG Uttrakhand	State	1	Not Applicable		PMG	Quarterly
SPMG West Bengal	State	1	Not Applicable		PMG	Quarterly
Total		6				

Account Heads

A uniform chart of accounts should be developed for PMG and the 5 SPMGs. PMG should take the lead in preparation of chart of accounts in consultation with the SPMGs. (The Chart of Accounts once prepared should be appended to this Annexure i.e. Project FM Manual).

At PMG and SPMG, the books of accounts should be maintained in the standard format as available in Tally software. The Primary books of accounts will include Cash Book, General ledger, Subsidiary ledgers like Contractors' ledger, Advances ledger etc. journal register, Fixed Asset Register and Bank Reconciliation Statements. Besides this, any other books and accounts, which may be considered necessary for the day-to-day work of

the PMG/SPMG, shall also be maintained. For e.g. register of cheques and bank drafts received, Guarantee Register, Bill Register etc.

Each accounting unit will generate a monthly trial and IUFs. This will facilitate timely preparation of the quarterly IUFs.

The monthly accounts should be submitted to Director Finance for review as part of the MIS. The Director Finance shall then submit a signed copy of the monthly accounts to the Project Director of the concerned SPMG/PMG as part of MIS.

At the close of each quarter, each SPMG will submit to PMG within 30 days from the end of the quarter an IUF in pre-agreed formats (which will also include financial information pertaining to EAs in the respective State). PMG will consolidate the IUFs of the five States with its own and submit a consolidated IUF for the Project to the Bank. The consolidated IUF should be submitted to the Bank within 60 days of the end of the quarter.

Some Significant Accounting Policies:

All advances to employees including travel advances, to be accounted for as advances when paid and expenditure accounted for when advances are cleared on submission of statements of expenditure with supporting bills/vouchers. These payments can be claimed from the Bank only when expenditure is accounted for on receipt of bills/vouchers.

Secured Mobilisation advances paid to contractors according to the terms of contract and backed by valid bank guarantees /Fixed Deposit Receipts to be accounted for as advances when paid and expenditures accounted for on submission of invoices after receipt of goods/ services as per agreed standards. However, these advances can be claimed from the Bank on when paid and need not be delayed till expenditure is accounted for. However advances other than secured mobilisation advances as per the terms of the contract may only be claimed after expenditure is accounted for on submission of invoices after receipt of goods services as per agreed standards. Therefore under the Advances control account the following accounting sub-heads should be maintained – Secured mobilization advances, Unsecured mobilization advances, Travel advance, Staff advances, any other advances.

Fixed Assets should be accounted for under the heads – Land, Buildings, Works under Component 2, Goods & Equipment, Furniture and Fixtures, Computer, Electrical Installations For Works, until the completion certificate is received, expenditures should be accounted for as Works in Progress (WIP). Expenditures on civil works constructed should be claimed from the Bank for amounts paid net of deductions i.e. net of retention money/security deposits, if any. The retention money/security deposits (other than refundable deposits) should be claimed from the Bank after they are actually paid. Refundable deposits should not be claimed from the Bank. All paid taxes (including taxes deducted at source) can be claimed from the Bank.

Chapter- 4 Disbursement

Disbursement

Release of funds by the World Bank against the expenditures incurred by implementing agencies on project activities is referred to as disbursement. The terms and details of disbursement are specified in the Credit/Loan Agreement.

5. The total project cost is USD 1,556 million. The Bank will finance 89% of the central share of the project costs, excluding land costs. The Bank will not finance the cost of purchase or acquisition of any land under the project.

6. The World Bank will provide an initial advance up to a fixed ceiling³ of USD 80 million in a designated account with the Reserve Bank of India (RBI). Thereafter further advances of funds will be disbursed by the Bank to the Designated Account every quarter based on amounts spent out of this advance as documented by the consolidated quarterly IUFs subject to the DA fixed ceiling. The PMG will submit consolidated withdrawal application requests for advances and reimbursement to the Bank through CAAA for the entire project based on expenditures incurred during the quarter and documented in the consolidated IUFs. The disbursement methods that may be used are (i) Advance (ii) Reimbursement and (iii) Direct Payment. Funds will be disbursed by the Bank under the following disbursement categories :

Sl. No	Category	Amount of the Financing Allocated (US\$ million)			Percentage of Expenditures to be Financed (Inclusive of Taxes)
		IDA	IBRD	Total	
1.	Institutional Development	154.81	0	154.81	89% of central share
2.	Priority Infrastructure Investments	41.25	799	840.25	89% of central share of eligible expenditures
3	Project preparation advance (PPA)	2.94	0	2.94	
4	Front -end fee	0	2	2	
	Total Amount	199	801	1000	

Under Category 1 (Institutional Development), the sharing of costs between the centre and state governments will be as shown in the table below:

³ This is usually equivalent to the estimated expenditure for the first six months. A fixed ceiling would mean that the PMG can draw up to that amount initially, but can also draw less if required. This fixed ceiling may be increased later during project implementation based on the requirements of the project. This is more flexible and saves the Government service charges.

Components	Central %	State %
A. Institutional Development		
A. NGRBA Operationalization and Program Management		
Ganga Knowledge Center	100%	0%
NGRBA PMG	100%	0%
Uttarakhand SPMG	70%	30%
UP SPMG	70%	30%
Bihar SPMG	70%	30%
Jharkhand SPMG	70%	30%
West Bengal SPMG	70%	30%
B. Technical Assistance for ULB Service Providers (SPMG)	70%	30%
C. Technical Assistance for Environmental Regulators		
CPCB (incl. Water Quality Monitoring System)	100%	0%
UP PCB	70%	30%
UK ECB	70%	30%
Bihar PCB	70%	30%
Jhar PCB	70%	30%
WB PCB	70%	30%
Research Study, pilots & training	100%	0%

The Bank will finance 89% of the central share of the project costs paid and reported in the consolidated Quarterly IUFRR.

7. Under Category 2 (Priority Infrastructure Investments), the central and state governments will be financing all investments in the 70:30 ratio except for those in industrial pollution control, where the center and state governments will each contribute 25% of the cost and the remainder 50% will be borne by the industry. The Bank will finance 89% of the central government's share of eligible expenditure.

8. Eligible expenditure for each investment under Category 2 is the actual paid expenditures excluding land costs incurred for a particular investment and reported to the Bank in the quarterly consolidated IUFRRs, subject to an overall ceiling of the amount sanctioned by the PMG for that particular investment based on the DPR, excluding land costs. This sanctioned amount will include the estimated costs of works, goods and services required for that investment including costs for preparing FR, DPR, RAP, and other estimated incremental operating costs of the EA for executing that particular investment and contingencies.

9. In other words, if the amount sanctioned by the PMG for investment Y based on the DPR is INR 10 million, which includes estimated cost of land, works, goods, services, prep costs of FR, DPR, RAP, and other estimated incremental operating costs of the EA for executing the specific investment and contingencies, then the eligible expenditure for that particular investment will be actual paid expenditures for the above-mentioned items excluding land costs reported in the IUFRRs subject to a ceiling of INR 10 million excluding land costs.

So, the Bank will finance (lesser of actual costs excluding land costs or sanctioned amount excluding land costs) *70%*89%.

However, if the investment pertains to the industrial pollution management sector, then the Bank will finance (lesser of actual costs excluding land costs or sanctioned amount excluding land costs) *25%*89%.

As mentioned earlier, for activities outsourced by the PEA to contractors/service providers, the EA will have to furnish every month a list of payments made (in standard format) together with the invoices to the SPMG for accounting. However, if any activity/ies are implemented by the EA's own staff, then they will have to furnish computation of actual costs for such activities to the SPMG and SPMG will make payments to the EA's Bank account through RTGS.

Funds from the World Bank will be made available to Government of India. GOI will then transfer funds to PMG through budgetary grants. PMG will then transfer funds to the SPMGs. As mentioned earlier Bank will disburse funds on the basis of IUFRRs. All the five SPMGs will send IUFRRs to PMG-NGRBA. PMG will consolidate these IUFRRs received from the States along with its own and submit the same to the World Bank Task Team Leader (TTL). Once approved by the TTL, PMG will submit the IUFRR along with documentation of the TTL's approval to CAAA (with a copy to the TTL) for processing claims and payment. The amount will be replenished to the extent of amount spent out of this advance as documented by the consolidated Quarterly Interim Unaudited Financial Reports (IUFRRs) furnished by the PMG in pre-agreed formats.

The Loan Agreement requires the PMG/SPMGs to ensure that loan proceeds are used only for the purposes set out in the loan documents and that the goods and services financed by the Project are procured with due regard to economy and efficiency and are suitable and satisfactory for. The agreement further stipulates that the funds may be withdrawn only to meet project expenses as they are paid.

The Bank would not finance the following:

- a) Items of expenditure not related to the Project components as defined by the legal agreements.
- b) Goods works or services not procured in accordance with procurement guidelines of the World Bank.
- c) Payments made or due for goods, works and services provided after the closing date of the project.
- d) Land acquisition Costs.
- e) Late payment penalties that were incurred in connection with a disputed payment which was under arbitration.
- f) Advance payments other than secured mobilisation advances paid to contractors as per the terms of contracts.
- g) Amounts parked in deposit/Bank accounts and accounted for as expenditure without expenditures being actually incurred.

Retroactive Financing

10. Expenditures incurred with the Bank's concurrence on or after January 1, 2011, but within 12 months before the date of loan signing, and according to the Bank's procurement guidelines are eligible for retroactive financing up to an overall ceiling of US\$ 10 million. The expenditure could be claimed by the PMG on the basis of a consolidated IUFRR submitted to the Bank after the project is declared effective.

Disbursement Letter

After the loan agreement has been signed the World Bank will issue a Disbursement Letter to the Government of India, with a copy to the Project Implementing Agency, outlining the disbursement procedures. (A copy of the Disbursement letter once received should be appended to this Manual.)

Before Withdrawal starts

Before withdrawals from the loan/credit account can begin, the following must occur:

- > The loan must be declared effective by the Bank,
- > The Bank must receive a formal notification listing those officials who have authority to sign withdrawal application together with specimen of their signature
This is done by CAAA.

The Initial Advance up to USD 80 Million will be credited to the DA once the project submits a request for an advance to the Controller of Aid, Accounts and Audit (CAAA) based on the requirements of the first six months.

Before submission of reimbursement requests to Bank through CAA&A the PMG may ensure that the consolidated IUFRRs have been submitted in prescribed formats, expenditure on each component, sub component has been properly accounted for and correctly classified.

On receipt of the information in regard to payment /disbursement from CAA&A and World Bank, PMG will make necessary entries in the Claim Register.

Stopping of Disbursements

The World Bank, as per its Operational/Business Policy will stop reimbursement of expenditures pertaining to the PMG or an SPMG if the PMG or the SPMG concerned fails to furnish its Annual external audit report within four months from the due date of submission of Audit Report to the Bank (i.e. by January 31 of the following calendar year). The reimbursement will resume on submission of acceptable audit report to World Bank.

Cancellation

Under the General conditions, the borrower country may request cancellation of any undisbursed loan/credit balances. The Bank may cancel loan/credit balances, in full or part, under the following circumstances:

- (a) If the right to make withdrawals has been suspended for a continuous period of 90 days.
- (b) If, in consultation with the borrower, the Bank determines that an amount is not required to finance the costs that were to have been financed from the loan.
- (c) In certain instances of non-compliance with procurement procedures (provisions).
- (d) If undisbursed loan balances remain in the loan account after the closing date has lapsed.

The action in this respect, if any, is to be taken by Union Ministry of Environment & Forest and the Ministry of Finance.

Chapter – 5

Internal Control Framework

Internal Control Framework

The Memorandum of Association (MOA) of PMG and SPMGs as well as the Investment specific MOAs together with the Implementation Arrangement Framework including the Procurement and Financial Management Manuals together with relevant MOEF/State departmental circulars will constitute the internal control framework.

The Consolidated Annual Action Plan of the Project approved by the PMG will form the basis of implementation. The World Bank will also review this Plan before finalisation. The Memorandum of Association (MOAs) of the PMG and the SPMGs lay down the framework for delegation of the administrative and financial powers mandated for the Project. Under Component 2, no subproject can be undertaken unless sanctioned by the PMG. All variations in contracts awarded by EAs under the Project will have to be approved by the SPMGs and beyond a certain threshold these will have to be approved by the PMG as provided in the MOAs of the PMG and SPMGs. In case of prior review contracts variation orders are also required to be approved by the World Bank as per the Bank's Procurement guidelines. These controls will ensure transparency in contract management.

Some of the key internal controls are:

- Approval of transactions in accordance with the prescribed delegation of administrative and financial powers mandated in the MOAs;
- Making expenditure only if it is included in the Annual Work Plan of the Project approved by PMG. Compliance with the Investment Framework and Implementation process as documented in "Implementation Arrangements for the Program" and Annex 6B of the Project Appraisal Document.
- Inspections of works by the EA as per norms agreed with the SPMG at the time of EA selection. These norms will be agreed and documented by the SPMGs at the time of selection of EAs.
- Third-party monitoring of quality of construction;
- Internal Audit.
- The Project M&E System

The project will have a system of quarterly internal audit under terms of reference agreed with the Bank. The Internal auditor will verify whether the internal controls are operating effectively as intended and whether timely corrective measures are being undertaken to address departures or non-compliances. These internal audit reports together with actions taken by management to address the audit observations will be submitted to the Bank. There should be regular follow-up and monitoring of resolution of audit observations by the Project Audit Committees both at the levels of SPMG and PMG.

At the State level, the Audit Committee will be chaired by the Project Director, SPMG, and having representation of participating EAs, ULBs and the State Finance Secretary or his designate,

Similarly an Audit Committee will be formed at the level of PMG. The Mission Director PMG will chair this Audit Committee. These Audit Committees will appoint the

Auditors, scrutinize the Audit Reports, consider the key findings of both external and internal audits and monitor timely action on these findings by the implementing agencies.

Implementation of the Project should be guided by the Annual Work Plan and the Procurement Plan prepared by each agency and approved PMG. The Work Plan should be monitored closely and corrections made based on implementation requirements at the ground level, wherever necessary, according to the budgeting cycle. The main purpose is to ensure that project funds are utilised for incurring expenditures on the approved schemes under the Project and not on items which are not related with the project/schemes.

In case of variations in the contract amounts, the procedures as documented in the Procurement Manual will be followed.

Payments should be made to contractors/consultants/suppliers within the time limit stipulated in the contract documents. The standard contract documents lay down such timelines for payment of acceptable invoices. If the invoice is not acceptable, the reasons of non-acceptance should normally be communicated to the contractor/supplier/consultant within two weeks of the receipt of the invoices. The standard contract documents also lay down norms for penalties for non-payment within the prescribed timeline as well as penalties for failure of delivery of goods/ works of agreed standards within prescribed timeline.

Since more EAs will be selected during project implementation, as part of the selection process the SPMG will ensure that specific criteria on EA selection as documented in the implementation arrangements are followed.

Compliance with these criteria may be ensured by the SPMG before any EA is selected for participating in the project. SPMG should maintain a checklist of these criteria. A responsible official from the SPMG will check these criteria, record the status against each of these and sign off.

Chapter - 6

Audit

Development Credit/Loan Agreement requires adequate auditing arrangements to cover both periodical internal audit and annual external audit of Project Financial Statements.

(A) Internal audit

The PMG and each SPMG will hire private firms of chartered accountants as internal auditors to assess effectiveness of internal controls and to provide independent assurance on the adequacy of internal controls to mitigate financial risks in the Project. The internal auditors will be appointed no later than 6 months of the date of effectiveness under Terms of reference and selection criteria agreed with the Bank. However, the PMG plans to set up its own internal audit unit within two years of the Project. Once the internal audit unit of the PMG has been established with adequate numbers of appropriately qualified full time staff to conduct quarterly internal audits in PMG and SPMGs, the project's internal audit function could be entrusted to this unit. The internal auditors will work in close coordination with the technical supervision consultants to obtain assurance that the fiduciary controls in contract management are in place and are operating as intended. The PMG will ensure that the work of internal auditors is duly considered by the external auditors when planning the scope of their audit examination. The PMG will share with the Bank a report on actions taken in response to the internal audit.

Terms of Reference of Internal Audit

Scope:

Internal audit should play a role in assisting management in bringing a systematic, disciplined approach to evaluate and improve the effectiveness of the internal control system. In conducting the audit, special attention should be paid to assessing whether adequate controls have been established and complied with to ensure:

- (a) All project funds have been used in accordance with the conditions of the relevant legal agreements and only for the purposes for which the financing was provided;
- (b) Project assets are adequately safeguarded and used solely for their intended purposes; and
- (c) All necessary supporting documents, records, and accounts have been kept in respect of all project transactions; including expenditures reported in the Interim Unaudited Financial Reports (IUFR).
- (d) Procurements for the Project have been done in accordance with the agreed Procurement procedures

Objective

The objective of internal audit is to provide management with an independent, objective and professional assessment that implementing entity's internal control systems are operating satisfactorily. Internal audit will provide project management with information on financial risk management and controls to enable the management to take timely corrective actions, wherever necessary. The internal auditor would recommend cost-effective methods for strengthening controls to prevent or detect significant financial irregularities or losses due to insufficient attention to economy, efficiency and effectiveness in the use of project funds.

Coverage

The internal audit will include such tests and controls as the Internal Auditor considers necessary under the circumstances. Specific areas of coverage of the internal audit will include the following.

- An assessment of the effectiveness of and degree of compliance with the financial controls laid down in the FM and Procurement Manuals. Whether funds have been used with due regard to economy, efficiency and effectiveness and for the purposes for which they were provided.
- Whether realistic annual work plans and procurement plans are prepared and expenditures are incurred as per approved plans and variances if any are monitored, analyzed and the learning used for preparing plans for subsequent years.
- Timeliness of flow funds to the spending units.
- Whether the selection criteria for EAs as documented in the “Implementation Arrangements for the Program” have been assessed by SPMGs and complied with in selection of EAs.
- Whether there is appropriate documentation of check measurement/inspection of works by EA as agreed and documented by SPMG at the time of EA selection;
- Whether contract payments have been made as per the terms of the contract. In doing so the auditors should consider the reports of the technical supervision consultants.
- Whether an appropriate system of accounting and financial reporting exists by which expenditures are properly recorded and eligible expenditures are claimed from the Bank in a timely manner. Whether adequate supporting documentation is being maintained for all project expenditures
- Whether an adequate system is in place to ensure that goods, works and services are being procured in accordance with guidelines prescribed in the Procurement Manual.
- Whether there is an appropriate contract management system commensurate to the size and nature of the sub-project executed by the EAs. Similarly whether there is an appropriate contract management system commensurate the size and number of contracts managed by the PMG/SPMG .Whether payments are being made to contractors/suppliers/consultants within the time limits stipulated in the contract documents.
- Whether appropriate controls as laid down in the FM/Procurement Manual are complied with for variation in contracts.
- Whether Bank balances are reconciled with the books by the PMG and the five SPMGs
- Anything else that the auditor considers pertinent.

Timing

The Internal Audit will be conducted on a quarterly basis, although the auditor will not cover all spending units every quarter. Internal audit at the PMG and each SPMG will cover the entire project on a sample basis i.e., the Internal Auditor of the PMG will cover samples from all spending units namely PMG and the Central EAs , Similarly the Internal Auditor of each SPMG, will cover samples from all spending units namely the SPMG and the EAs in that State. The auditor will draw up an audit plan for each quarter at the beginning of the financial year in consultation with the respective management. The audit plan should indicate sample coverage at each level of implementation. The sample selection would be based on an assessment of the risks applicable to the operation.

Reporting

The Internal Auditor will provide a report to the project management highlighting findings within 45 days of the end of the quarter to enable the management to take timely corrective action. Copies of the Internal Audit Report together with actions taken by management to address the audit observations will be submitted to the Bank. One of the most serious concerns is that despite widespread knowledge of control weaknesses there is limited response from implementing agencies by way of timely remedial actions on the findings of audits. This will need to be improved by continued follow-up and monitoring of resolution of audit observations by the Project Audit Committees both at the levels of SPMG and PMG.

At the State level, an Audit Committee will be formed chaired by the Project Director, SPMG and having representation of participating EAs, ULBs and the State Finance Secretary or his designate, These Audit Committees will consider the key findings of both external and internal audits and monitor timely action on these findings by the implementing agencies.

Similarly an Audit Committee will be formed & chaired by Mission Director at the level of PMG.

General

The internal auditor should be given access to all relevant documents (Loan Agreement and Project Agreements, Minutes of Negotiation, Project Appraisal Document, Project Implementation Plan, Financial Management Manual, Procurement Manual and Bank Procurement Guidelines, M&E assessments, technical assessment, Aide-memoires and relevant correspondences, and any other information associated with the project and deemed necessary by the auditor. It is highly desirable that the auditors become familiar with Bank's Guidelines on Disbursements, Procurements and Financial Reporting. These documents will be provided to the Internal Auditor by the PMG/SPMG.

(B) External Audit

Each SPMG and the PMG will prepare annual financial statements and have them audited by an independent external auditor appointed by the PMG under terms of reference and selection criteria agreed with the Bank. Each SPMG will submit its annual audited financial statements together with the audit report to the PMG. The PMG will prepare a consolidated report of the annual audited financial statements of the five SPMGs together with its own and submit the same along with the individual audit reports and audited financial statements of the PMG and the SPMGs to the Bank by September 30 every year. The PMG Audit Committee will ensure that the auditors follow the agreed terms of engagement and the audit observations are satisfactorily dealt with in a timely manner. If the annual audited financial statements together with the audit report of the PMG or any SPMG is not submitted to the Bank within four months of the due date of submission (i.e. January 31 of the following calendar year), remedies will be applied to the defaulting entity as per the Bank's Operational / Business Policy (10.02) – namely that disbursements to the project based on IUFs will be discontinued. The PMG will also submit to the Bank the annual entity audit report of the NGRB programme.

TERMS OF REFERENCE FOR THE AUDIT OF PROJECT FINANCIAL STATEMENTS OF the NGRB Project

Background[Project Aims, Timelines and Objectives]⁴

Objective

The essence of the World Bank⁵ audit policy is to ensure that the Bank receives adequate independent, professional audit assurance that the proceeds of World Bank loans were used for the purposes intended,⁶ that the annual project financial statements are free from material misstatement, and that the terms of the loan agreement were complied with in all material respects.

The objective of the audit of the Project Financial Statement (PFS) is to enable the auditor to express a professional opinion as to whether (1) the PFS present fairly, in all material respects, the sources and applications of project funds for the period under audit examination, (2) the funds were utilized for the purposes for which they were provided, and (3) expenditures shown in the PFS are eligible for financing under the relevant loan or credit agreement. In addition, where applicable, the auditor will express a professional opinion as to whether the Financial Management Reports submitted by project

⁴ The background should normally include a detailed description of the project including information on project sources of funding; the purposes for which the funds are intended; and a general description of implementation arrangements, including the organizational structure of all implementing entities.

⁵ "World Bank" includes the International Development Agency and the International Bank for Reconstruction and Development. "Loans" includes credits and grants to which the TORs would apply; and "borrower" includes recipients of such loans.

⁶ The Bank's charter [Article III Section V (b) of IBRD's Articles of Agreement and Article V Section 1(g) of IDA's Articles of Agreement] specify that: "The Bank shall make arrangements to ensure that the proceeds of any loan are used only for the purposes for which the loan was granted, with due attention to considerations of economy and efficiency and without regard to political or other non-economic influences or considerations."

management may be relied upon to support any applications for withdrawal, and whether adequate supporting documentation has been maintained to support claims made by project management for reimbursement of expenditures incurred under the Statement of Expenditure method of reimbursement.

The books of account that provide the basis for preparation of the IUFRs are established to reflect the financial transactions of the project and are maintained by the PMG and SPMGs.

Standards

The audit will be carried out in accordance with the Auditing Standards issued by the Institute of Chartered Accountants of India. The auditor should accordingly consider materiality when planning and performing the audit to reduce audit risk to an acceptable level that is consistent with the objective of the audit. Although the responsibility for preventing irregularity, fraud, or the use of loan proceeds for purposes other than as defined in the legal agreement remains with the borrower, the audit should be planned so as to have a reasonable expectation of detecting material misstatements in the project financial statements.

Scope⁷

In conducting the audit, special attention should be paid to the following:

- (e) All external funds have been used in accordance with the conditions of the relevant legal agreements and only for the purposes for which the financing was provided. Relevant legal agreements include the Financing Agreement, the Project Agreement, and the Minutes of Negotiations;
- (f) Counterpart funds have been provided and used in accordance with the relevant legal agreements and only for the purposes for which they were provided;
- (g) All necessary supporting documents, records, and accounts have been kept in respect of all project transactions including expenditures reported via IUFRs where applicable. Clear linkages should exist between the books of account and reports presented to the Bank; and
- (h) The project accounts have been prepared in accordance with consistently applied Accounting Standards and present fairly, in all material respects, the financial situation of the project at the year end and of resources and expenditures for the year ended on that date.

Project Financial Statements

The Project Financial Statements should include-

- A. Statement of Sources and Applications of Funds: The contents of Project Financial Statements (PFS) are specific to the sector, the project design and the type of implementing entity. These formats therefore vary from one Project to another. The formats of PFS are prepared in consultation with the implementing entity during the preparation of the Project.

⁷ In response to identified project risks, the scope may be expanded to include a report or the expression of an opinion on specific aspects of the operation such as internal controls, compliance with Bank procurement policies, or efficiency and effectiveness in the use of loan proceeds.

- B. Reconciliation of Claims to Total Applications of Funds. The PFS include a reconciliation between expenditure reported as per the Statement of Sources and Applications of Funds and expenditure claimed from the World Bank through Statements of Expenditures (SOE), documented claims or report based methods of reimbursement.
- C. Other Statements or Schedules as may be applicable in particular circumstances and as specified in the relevant legal agreements, such as:
- A statement showing appropriate major heads of expenditure. (say by Project Component/Sub-components)
 - A summary of cumulative expenditures by category of expenditure such as buildings, equipment, furniture, vehicles, major rehabilitation of canals etc
- D. Management Assertion: Management should sign the project financial statements and provide a written acknowledgement of its responsibility for the preparation and fair presentation of the financial statements and an assertion that project funds have been expended in accordance with the intended purposes as reflected in the financial statements. An example of a Management Assertion Letter is shown at Appendix 1.

The auditor should ensure reconciliation of the Annual Project Financial Statements with the four quarterly IUFs submitted to the Bank. The auditor should apply such tests as the auditor considers necessary under the circumstances to satisfy the audit objective. In particular, these expenditures should be carefully examined for project eligibility by reference to the relevant financing agreements. Where ineligible expenditures are identified as having been included in withdrawal applications and reimbursed against, these should be separately noted by the auditor.

Audit Report

An audit report on the project financial statements should be prepared in accordance with the Auditing Standards promulgated by the Institute of Chartered Accountants of India. Those standards require an audit opinion to be rendered related to the financial statements taken as a whole, indicating “unambiguously whether it is unqualified or qualified and, if the latter, whether it is qualified in certain respects or is adverse or a disclaimer of opinion.” In addition, the audit opinion paragraph will specify whether, in the auditor’s opinion, (a) with respect to IUFs adequate supporting documentation has been maintained to support claims to the World Bank for reimbursements of expenditures incurred; and (b) except for ineligible expenditures as detailed in the audit observations, if any, appended to the audit report, expenditures are eligible for financing under the Loan/Credit Agreement.

The project financial statements and the audit report of the PMG and each of the five SPMGs should be received by the Bank no later than 6 months after the end of the fiscal year. The auditor should also submit two copies of the audited accounts and audit report to the Implementing Agency.

Management Letter

In addition to the audit report on the project financial statements of the PMG and five SPMGs, the auditor may prepare a management letter for each agency containing

recommendations for improvements in internal control and other matters coming to the attention of the auditor during the audit examination which do not affect the audit opinion but are required to be brought to the management's attention.

Where a management letter is prepared by the auditor, a copy of the same will be supplied to the Bank. Else, a written advice may be made that no management letter was prepared together with the audit report on the project financial statements.

General

The auditor should be given access to any information relevant for the purposes of conducting the audit. This would normally include all legal documents, correspondence, and any other information associated with the project and deemed necessary by the auditor. The information made available to the auditor should include, but not be limited to, copies of the Bank's Project Appraisal Document, the relevant Legal Agreements, a copy of these Guidelines, and a copy of the Bank's Financial Management Assessment of the project entity. It is highly desirable that the auditor become familiar with other Bank policy documents, such as OP/BP 10.02, the Bank's internal guidelines on Financial Management that include financial reporting and auditing requirements for projects financed by the World Bank. The auditor should also be familiar with the Bank's Disbursement Manual. Both documents will be provided by the Project staff to the auditor.

Chapter – 7

Staffing

The suggested staffing structures for the project are as follows:

For PMG:

The finance function will be overseen by the Additional Mission Director, Administration and coordination. Under him there will be a Finance Director, Senior Financial Management Specialist and Specialist Accountants

For SPMGs in U.P., Bihar and Bengal

Finance Director (Unit Head)	<ul style="list-style-type: none"> • Responsible for financial management, procurement, and administrative functions of the SPMG. • Responsibility for staff and task management of the FM, Procurement and Admin Unit of the SPMG • Responsible for all financial management, accounting, disbursements and audits of SPMG's program 	<ul style="list-style-type: none"> • Relevant degree with 15 years relevant experience in government (preferably with PSU experience)
Sr. Financial Management Specialist/Accountant	<ul style="list-style-type: none"> • Assist in financial management, accounting, and disbursements • Facilitate audits and address issues raised in audit reports • Developing and using effective systems for financial management (including related information management, monitoring, and reporting) for the NGRBA program compatible with government systems • Facilitation (including appropriate training) of Central and State NGRBA-related staff on financial management arrangements 	<ul style="list-style-type: none"> • Chartered Accountant with 10 years relevant experience • Strong skills with financial management • Experience working with government FM systems • Experience with working on financial management aspects of World Bank projects desirable
Support Staff	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • B-Com Graduates with at least 3 years work experience • Proficient in Tally

For SPMG in Uttrakhand

Finance Director (Unit Head)	<ul style="list-style-type: none"> • Responsible for financial management, procurement, and administrative functions of the SPMG. • Responsibility for staff and task management of the FM, Procurement and Admin Unit of the SPMG • Responsible for all financial management, accounting, disbursements and audits of SPMG's program 	<ul style="list-style-type: none"> • Relevant degree with 15 years relevant experience in government PSU or Chartered Accountant with 15 years relevant experience • Strong skills with financial management • Experience with working on financial management aspects of World Bank projects desirable
Accountants	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • B-Com Graduates with at least 3 years work experience • Proficient in Tally

This Chapter needs to be updated based on actual staffing in PMG and SPMGs.

Example of a Management Assertion Letter⁸

(Project Letterhead)

(To Auditor)

(Date)

This assertion letter is provided in connection with your audit of the financial statements of the _____ Project for the year ended _____. We acknowledge our responsibility for the fair presentation of the financial statements in accordance with the cash basis of accounting followed by the Government of India, and we confirm, to the best of our knowledge and belief, the following representations made to you during your audit:

- The project financial statements are free of material misstatements, including omissions.
- Project funds have been used for the purposes for which they were provided.
- Project expenditures are eligible for financing under the Loan/Credit agreement.
- There have been no irregularities involving management or employees who have a significant role in internal control or that could have a material effect on the project financial statements.
- We have made available to you all books of account and supporting documentation relating to the project.
- The project has complied with the conditions of all relevant legal agreements, including the Financing Agreement, the Project Agreement, the Project Appraisal Document, the Minutes of Negotiations, and the Borrower's Project Implementation Plan.

(Senior Executive Officer)

(Senior Financial Officer)

⁸ This sample management assertion letter is based on ISA 580, "Management Representations," *Handbook of International Auditing, Assurance and Ethics Pronouncements*, International Federation of Accountants, 2007

Environmental and Social Management Framework (ESMF)

CONTENTS

Section 1	Background	70
1.1	Background.....	70
1.2	Objective.....	71
1.3	The ESMF	72
Section 2	Environmental and Social Impacts	73
2.1	General	73
2.2	Portfolio of Investments	73
2.3	Environment and Social Impacts.....	75
2.3.1	Sewerage Schemes	75
2.3.2	Sewage Treatment Plants.....	76
2.3.3	Solid Waste Management Investments.....	77
2.3.4	Industrial Pollution Control Initiatives	77
2.3.5	River Front Management Investments	78
Section 3	Environment and Social Regulatory Framework	80
3.1	General	80
3.2	Applicable Laws and Regulations - Environmental	80
3.2.1	Legal Framework of Government of India.....	80
3.2.2	Key Environmental Laws and other related Regulations	81
3.3	Applicable Laws and Regulations - Social.....	83
3.3.1	National Policies and Acts.....	83
3.4	Other legislations applicable to construction activities	86
Section 4	Environment and Social Management Framework	89
4.1	Objectives	89
4.2	Purpose of the ESMF.....	89
4.3	Screening and categorization of Investments (during the Feasibility Study stage)	90
4.4	Addressing environmental and social impacts (during preparation of the DPR)	92
4.4.1	High impact categories	92
4.4.2	Resettlement Policy and Land Acquisition Framework (RPLAF)	93
4.4.3	Tribal Management Framework (TMF)	104
4.4.4	Gender Assessment and Development	105
4.4.5	Consultation and Information Disclosure.....	107

4.4.5	Low impact categories	114
4.5	Stakeholder Consultations and Disclosure of ESA	115
4.6	Environmental Regulatory Compliance	116
Section 5	Implementation, Monitoring and Reporting Arrangements	121
5.1	General	121
5.2	NGRBA Institutional Arrangements	121
5.3	Implementation, Monitoring and Reporting Arrangements for the ESMF	122
5.4	Social Accountability and Grievance Redressal Mechanism	129
5.5	Training and Capacity Building	130
Section 6	Public Consultations and Disclosure	134
6.1	General	134
6.2	Minutes of Public Consultation Meetings	136

List of Appendices

Annexure I Guidance on EIA of High impact category Sub-Project	157
Annexure II Generic Environmental Guidelines / Management Plan for Low impact category Investments.....	164
Annexure III Roles and Responsibilities of Social Development Specialists	168
Annex IV	171
Sample Terms of Reference for Environmental and Social Audit of NGRBA Program Investments	171

List of Tables

Table 2.1	Portfolio of investments under NGRBA program	74
Table 3.1	Environmental Regulations and Legislations	81
Table 3.2	The land acquisition process	85
Table 4.1	Screening format	91
Table 4.2	Entitlement Matrix	99
Table 4.3	Information to be Disclosed	110
Table 4.4	Stakeholder Mapping	112
Table 4.5	Environmental Regulatory Requirements for NGRBA Investments	117
Table 4.6	Environmental Regulatory Compliance during Construction and Operation of NGRBA Investments	118
Table 5.1	Mitigation, Monitoring, Responsibility and Timeline	126
Table 5.2	ESMF Implementation and Monitoring Arrangement	128
Table 5.3	Generic Training Programme	132
Table 6.1	Details of the public consultations held at the five selected states	135

List of Abbreviations

AF	Affected Family
BPL	Below Poverty Line
CPRs	Common Property Resources
EA	Executing Agency
EMP	Environmental Management Plan
EP	Entitled Person
ESA	Environmental and Social Assessment
ESMF	Environmental and Social Management Framework
GAP	Ganga Action Plan
GoI	Government of India
GSMP	Generic Safeguard Management Plan
ha	Hectare
LAA	Land Acquisition Act
MoEF	Ministry of Environment and Forests
NGO	Non-Government Organization
NGRBA	National Ganga River Basin Authority
NLCP	National Lake Conservation Plan
NRCD	National River Conservation Directorate
PAP	Project Affected Person
PMG	Programme Management Group
R & R	Resettlement and Rehabilitation
RAP	Resettlement Action Plan
ROW	Right of Way
SC	Scheduled Caste
SPMG	State Programme Management Group
SRCA	State River Conservation Authorities/
SECs	State Executive Committees
ST	Scheduled Tribe
u/s	Under Section
ULB	Urban Local Body

Glossary of Terms

Bigha	1/5 of an acre
Development Block	A number of villages grouped together form a Development Block.
District Collector/ Magistrate	Administrative head of a District.
Divisional Commissioner	Administrative head of a division comprising of a number of districts.
Grievance Redressal Cell	A cell set up for grievance redressal by the competent authority at various levels
Hectare	A unit for measuring land area. (10,000 m ²).
Kachha	Structures with stone/ mud wall/ thatch roof
Non-titleholders	Drawing economic benefits from a piece of land, but not the owner of the land
Panchayat	Elected local self-governing body at village level.
Panchayat Samiti	Local Self-governing body at Block level
Pucca	Cement, bricks or concrete build structure
Sarpanch	Elected Head/chief of a village level body.
Semi Pucca	Structures with tiles/ thatch roof/ brick cement wall
Tehsil/ Subdivision	A group of Blocks

Section 1 Background

1.1 Background

1. River Ganga has significant economic, environmental, and cultural value in India. Rising in the Himalayas and flowing into the Bay of Bengal, the river traverses a course of more than 2,500 km through the plains of north and eastern India. The Ganga basin (which also extends into parts of Nepal, China and Bangladesh) accounts for about 26 percent of India's landmass, 30 percent of its water resources, and more than 40 percent of its population. Ganga is India's holiest river and has a cultural and spiritual significance that far transcends the boundaries of the basin.
2. Increasing population in the basin and haphazard urbanization and industrial growth has significantly impacted the water quality of River Ganga, particularly during the dry season. The primary sources of pollution are untreated sewage and industrial wastewater. Non-point pollution sources from agriculture and livestock, religious activities at various locations along the river, as well as poor solid waste management, also contributes to pollution. In addition, substantial abstraction of water, primarily for irrigation, has led to low flows and associated poor water quality in the critical middle stretch of the river.
3. The previous attempt to clean the river, such as Ganga Action Plan (GAP) launched in 1985 have provided some gains in arresting rate of water quality degradation, but lot more needs to be done.
4. Lessons from earlier experience indicate that improving water quality in the Ganga cannot be achieved by plugging the infrastructure gap alone. Any effective initiative will have to adopt a three-pronged approach by (i) establishing a basin-level multi-sectoral strategy for addressing pollution in the river (ii) making relevant institutions operational and effective and (iii) implementing a phased program for Ganga clean-up.

5. As a major first step in this direction, the Government of India (GoI) has established the National Ganga River Basin Authority (NGRBA) for comprehensive management of the river. The NGRBA program will adopt a river-basin approach and has been given a multi-sectoral mandate to address both water quantity and quality aspects. The NGRBA has resolved that by year 2020 no untreated municipal sewage or industrial effluent will be discharged into River Ganga.

1.2 Objective

6. The NGRBA program will finance infrastructure investments to reduce pollution loads at priority locations on the river. The investments are intended to exemplify, among other attributes, the high standards of technical preparation and implementation, sustainability of operations, and public participation. The majority of investments in the NGRBA program are expected to be in the wastewater sector, particularly in wastewater treatment plants and sewerage networks. Investments will also be supported in industrial pollution control and prevention (e.g. common effluent treatment plants), solid waste management (e.g. collection, transport and disposal systems), and river front management (e.g. improvement of the built environment along river stretches, improvement of small *ghats* and electric crematoria, and the conservation and preservation of ecologically sensitive sites). Many investments are likely to combine elements of more than one of these sectors.
7. An investment framework has been finalised for selection of program investments. The objectives of this investments framework are to:
 - d) provide a filter for all the NGRBA investments, for ensuring that the selected investments are well-prepared and amongst the most effective in reducing the pollution loads;
 - e) make transparent the decision-making process on investments selection; and
 - f) Ensure that the investments are implemented in a sustainable manner.

1.3 The ESMF

8 Given the distributed nature of investments in multiple states, the investments under the program may entail environmental and social impacts. The environment and social framework is intended to help manage the social and environmental impacts through appropriate measures during the planning, design, construction and operation phases of various investments. The framework will identify the adverse environment and social impacts and provide specific guidance on the policies and procedures to be followed for environmental and social assessment along with roles and responsibilities of the implementing agencies.

9 The document essentially comprises the following key sections:

- A brief summary of key probable Environmental and Social Impacts
- Environment and Social Regulatory Framework applicable for the program
- Environment Management Framework
- Social Management Framework
- Project Appraisal, Monitoring and Reporting Arrangements
- Institutional Arrangements
- Training and Capacity Building for ESMF

Section 2 Environmental and Social Impacts

2.1 General

- 10 The implementation of the river pollution mitigation investments may have environmental and social issues like pollution of surface and ground water bodies or other natural resources, issues related to air pollution or other environmental health and sanitation, inconvenience to public due to traffic diversions and construction activities, issues of land acquisition and rehabilitation and resettlement. The PMG recognizes these environmental and social issues and prepares itself to address their mitigation through a set of management procedures elaborated in this Environmental and Social Management Framework (ESMF). PMG, through state level SPMGs will ensure that policies and procedures described in the ESMF are applied to all investments.
- 11 To evolve its environmental and social management procedures, the PMG has carefully examined the portfolio of investments previously executed under the river pollution mitigation investments under Ganga Action Plan (Phase I and II) along with similar other urban infrastructure investments implemented elsewhere in the country under various Government of India sponsored schemes, supplemented by detailed environmental and social analysis of Ganga Basin and field visits to existing and proposed sample investments.

2.2 Portfolio of Investments

- 12 The portfolio of investments to be implemented is presented in **Table 2.1**. These investments in the first phase of program is spread across several cities and/or towns within the Ganga main stem states of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal and may be extended to entire Ganga basin comprising of 11 states in later phases.

TABLE 2.1 PORTFOLIO OF INVESTMENTS UNDER NGRBA PROGRAM

S.No.	Portfolio of investments	Possible Portfolio Components
1	Sewerage and Sanitation Systems/ Sewage Treatment Plants (New / Upgradation)	<ul style="list-style-type: none"> • Provision for an entirely new sewerage network including individual house connections • Extensions to existing sewerage networks in some parts of cities/ towns to include areas which are un-sewered hitherto or to newly developed areas in the recent years • Entirely new sewage treatment plant/ facility • Augmentation of capacities in existing sewage treatment plant/ facility • Remodelling / Renovation of existing sewage treatment facilities, resulting in better effluent quality and augmented treatment capacity
2	Solid Waste Management	<ul style="list-style-type: none"> • Engineered landfills with leachate collection and treatment systems • Waste segregation and composting facilities • Waste Processing or Waste to Energy Facilities
3	Industrial Pollution Control Initiatives	<ul style="list-style-type: none"> • Common Effluent Treatment Plant • Common Hazardous Waste Management Facilities • Pilot treatment facilities for various industrial sectors • Waste Minimization and Clean Technology Programs
4	River Front Management Investments	<ul style="list-style-type: none"> • River Front Management and beautification • Construction of Bathing Ghats • Development of Cremation grounds Improvement to existing crematoria, situated on river banks •

13 The Investments aims at preventing discharge of untreated sewage into River Ganga and thus aiding abatement of river water pollution and improvement in water quality. Consequently, this also contributes to the improvement in the status of environment health and sanitation for the citizens of the concerned cities and towns. The Investments, to be implemented, have its own beneficial as well as adverse impacts. The significance of these impacts depends on the individual project, its size and location. The likely beneficial impacts of the investments include the following.

- Improvement in sewerage collection and treatment within the cities/towns
- Prevention of storm drains carrying sanitary sullage or dry weather flow
- Prevention of ground water and soil pollution due to infiltration of untreated liquid waste

- Prevention of discharge of untreated sewage into River Ganga
- Improvement in water quality of River
- Improvement in environmental sanitation health and reduction in associated health hazards within the cities/towns
- Improvement in quality of life, human dignity and increased productivity
- Reduced nuisance of open defecation due to low cost sanitation and reduced malarial risks and other health hazards
- Improved community participation and sense of ownership

2.3 Environment and Social Impacts

14 This section identifies the environmental and social impacts of the investments with a view to facilitate early evaluation of such impacts and integrate suitable mitigation measures during planning stage itself. Based on field visits and discussion with the potential executing agencies, the typical adverse impacts associated with the investments are summarized below:

2.3.1 Sewerage Schemes

15 The investments involve laying of sewers (both gravity and pressure lines), provision of sewer connections to individual houses, gravity based interception and diversion arrangements to drains carrying sanitary sullage/ dry weather flow, construction of new sewage pumping stations including installation of electro-mechanical works, renovation and/or remodelling of existing sewage pumping stations among others. Most of these investments would be concentrated in one location except for laying of sewers (both gravity and pressure lines), which are linear investments and the sewers are largely buried below ground or sometimes may be laid on or above the ground depending upon the available/required slope or gradient.

16 Although there would not be any permanent negative or adverse environmental impacts, **the potential environment issues** associated with sewerage and sanitation investments are:

- surface and groundwater contamination due to leakage and/ or improper joints in sewers

- severance of utilities and requirement for relocation due to sewer laying
- disruption due to local traffic diversion and congestion during sewer laying works
- impact on public/ private properties and other sensitive receptors along the sewer alignment during construction
- disposal of excess excavated soil and construction debris
- Exploitation of water sources for meeting construction water demand.
- air and noise pollution from construction equipment's
- Health and safety concerns of workers, while laying or rehabilitating existing sewers.

2.3.2 Sewage Treatment Plants

17 The investments may involve construction of new sewage treatment plants, augmentation of treatment capacity in existing sewage treatment plants and renovation and/or re-modelling of existing sewage treatment plants, resulting in improved effluent quality and disposal as per prescribed standards. Most of these investments would be concentrated in one location and the requirement of land for these investments is small as compared to other infrastructure development investments.

18 Although there would not be any permanent negative environmental impacts, the **potential environment issues** associated with sewage treatment facility are:

- change in land use pattern, in case of proposed sewage treatment plants at new locations
- change in channel hydraulics, triggering erosion and siltation problems, if sewage treatment plants are proposed in flood plains
- change in hydrology and drainage patterns due to the construction activity, particularly, if sewage treatment facility is located in flood plains
- health and safety issues associated with operation and maintenance of sewage treatment facility, particularly exposure to methane and other noxious gases, sludge contaminated with heavy metals etc.
- issues associated with the disposal of sludge, if sewage is likely to be contaminated with heavy metals due to mix of industrial waste with sewage

- emission of methane, if not utilized for power generation or any other gainful applications
- water logging problems due to improper/ inadequate disposal of treated effluent or effluent not conforming to stipulated discharge standards during operation

2.3.3 Solid Waste Management Investments

19 These investments may involve construction of municipal waste receiving and segregation yards, composting yards, engineered landfills with leachate collection and disposal arrangements among others. Most of these works would be spread over in one location and the requirement of land for these investments is rather small as compared to other infrastructure development investments. Generally, the land for the solid waste treatment facility will be selected away from habitations.

20 Although there would not be any permanent negative environmental impacts, the **potential environment issues** associated with Solid Waste Management are:

- surface and ground water contamination due to unmanaged leachate collection and disposal
- change in channel hydraulics, triggering erosion and siltation problems, if solid waste management facility is proposed in flood plains
- change in hydrology and drainage pattern, if the facility is located in flood plains
- air quality, odour and fly nuisance due to the improper operation of waste disposal or processing facilities
- issues pertaining to siting of facility such as change in land use pattern, proximity to settlements, cultural properties and any other sensitive receptors
- air and noise pollution from construction equipment's
- Health and safety issues associated with operation and maintenance of solid waste treatment facility, particularly of workers manually handling wastes.

2.3.4 Industrial Pollution Control Initiatives

21 Investments under this component could involve development of common industrial effluent treatment plants or hazardous waste management plants, etc.

However, implementation of these pollution control facilities may lead to certain **environmental impacts** such as the following:

- Pollution of water resources
- Soil contamination due to the disposal of untreated / partially treated effluents and / or hazardous wastes
- air quality, odour and fly nuisance due to the improper operation of treatment facilities
- health impacts on the neighbouring communities
- Issues of leachate and loss of productivity to agriculture lands due to the disposal of sludge from the facilities.

2.3.5 River Front Management Investments

22 These works involve river front development schemes, beautification of river banks, construction of bathing *ghats* along rivers, lakes and water bodies improvement, redevelopment of cremation grounds among others. These works would be included under one investment. The requirement of land for these works is moderate and much lesser than that is required for the sewage treatment or solid waste treatment facility. Although, these facilities are frequently used by the citizens, the location of these investments will not generally involve displacement of people.

23 There would not be any permanent adverse or negative impacts due to these investments, if there are no major interferences in the river flow channel hydraulics, which can trigger erosion and siltation issues either *in situ* or elsewhere along the course of the river. Impacts due to such investments could be minimized or mitigated by appropriate interventions and engineering designs.

24 The **environmental issues** that may arise due to investments like river front development schemes, beautification of river banks, construction of bathing *ghats*, and development of cremation grounds are:

- change in land use, and drainage pattern
- change in channel hydraulics, triggering erosion and siltation problems either at *in situ* or elsewhere along the course of river
- impact due to inadequate solid and liquid waste disposal arrangements

- impact due to inadequate sanitation, health and safety facilities
- impact on river water quality due to proposed amenities
- impact on environmental aesthetics and cultural value

25 As regards the **Social Impacts**, the requirement of land for all these investments is rather small. However, wherever there is displacement of titleholders/ non-titleholders, it may involve resettlement issues and may result in temporary loss of access to private and common properties during construction. Most of these investments would be concentrated in one location and the requirement of land for these investments is rather small as compared to other infrastructure development investments. Hence, the social impacts would be minimal.

Section 3 Environment and Social Regulatory Framework

3.1 General

26 The national, state and local environmental and social regulatory requirements that are applicable to the investments proposed are given in this section. As the applicability of these legal requirements would depend on the nature of the specific investments, the exact applicability cannot be determined at this stage. SPMGs and the State level executing agencies (EA) would ensure compliance of these requirements by all concerned.

27 PMG would verify whether the investments are in compliance with these regulatory requirements prior to granting approval to the investments and disbursement of funds. During implementation, PMG would ensure that SPMGs monitor the ESMF compliance in all investments on an on-going basis.

3.2 Applicable Laws and Regulations - Environmental

28 The following laws and regulations are applicable to the environmental and social aspects of the investments implemented under the programme:

- Policy and Regulatory Framework of Government of India (GoI)
- Environmental Policy and Regulations of the respective State Governments
- Legislations applicable to construction activities

3.2.1 Legal Framework of Government of India

29 The Government of India has laid out various policy guidelines, acts and regulations pertaining to environment. The Environment (Protection) Act, 1986 is umbrella legislation for the protection of environment. As per this Act, the responsibility to administer the legislation has been jointly entrusted to the Ministry of Environment and Forests (MoEF) and the Central Pollution Control Board (CPCB)/ State Pollution Control Boards (SPCBs).

3.2.2 Key Environmental Laws and other related Regulations

30 The key environmental laws and regulations as relevant to the investments under the NGRBP are given in **Table 3.1**. The key environmental regulations can also be accessed at www.MoEF.nic.in/rules-and-regulations

TABLE 3.1 ENVIRONMENTAL REGULATIONS AND LEGISLATIONS

S. No	Act / Rules	Purpose	Applicable Yes/ No	Reason for Applicability	Authority
1	Environment Protection Act, 1986	To protect and improve overall environment	Yes	As all environmental notifications, rules and schedules are issued under this act.	MoEF, Gol, DoE, State Govt. CPCB, SPCBs
2	Environmental Impact Assessment Notification 14th Sep-2006	Mandatory environmental clearance to certain category of new development activities following environmental impact assessment	Yes	This notification is applicable only for Sewage Treatment Facility and Solid waste Treatment facility investments	MoEF, EIAA
3	Municipal Wastes (Management and Handling) Rules, 2000	To manage collection, transportation, segregation, treatment, and disposal of municipal solid wastes	Yes	This notification is applicable only for Municipal Solid waste Treatment facility investments	MoEF, EIAA, CPCB, SPCBs
4	Coastal Regulation Zone (CRZ) Notification 1991 (2011)	Protection of fragile coastal belt	No	If Project location is located along coastal belt	
5	Land Acquisition Act, 1894 (As amended)	Sets out rules for acquisition. of land by government	Yes	applicable in case of acquisition of land for investments	Revenue Department, State Government
6	The Forest (Conservation) Act, 1980	To check deforestation by restricting conversion of forested areas into non- forested areas	Yes	applicable if there is diversion of forest land for non-forest activities i.e. forest land required for any of the investments	Forest Department, State Government and Ministry of Environment and Forests, Government of India

S. No	Act / Rules	Purpose	Applicable Yes/ No	Reason for Applicability	Authority
7	Wild Life (Protection) Act, 1972	To protect wildlife through National Parks and Sanctuaries	No	This act will be applicable, if there are any points of wildlife crossings in proximity to project locations	Chief Conservator Wildlife, Wildlife Wing, State Forest Department and Ministry of Environment and Forests, Government of India
8	Air (Prevention and Control of Pollution) Act, 1981	To control air pollution by controlling emission of air pollutants as per the prescribed standards.	Yes	This act will be applicable during construction;	SPCBs
9	Water Prevention and Control of Pollution) Act, 1974	To control water pollution by controlling discharge of pollutants as per the prescribed standards	Yes	This act will be applicable during construction	SPCBs
10	The Noise Pollution (Regulation and Control) Rules, 2000	The standards for noise for day and night have been promulgated by the MoEF for various land uses.	Yes	This act will be applicable for all construction equipment deployed at worksite	SPCBs
11	Ancient Monuments and Archaeological Sites and Remains Act, 1958	Conservation of cultural and historical remains found in India	Yes	This act will be applicable, only if any of the investments is in proximity to any Ancient Monument, declared protected under the act.	Archaeological Dept. GoI, Indian Heritage Society and Indian National Trust for Art and Culture Heritage (INTACH).
12	Public Liability and Insurance Act, 1991	Protection from hazardous materials and accidents.	Yes	Contractor need to stock hazardous material like diesel, Bitumen, Emulsions etc.	SPCBs
13	Explosive Act, 1984	Safe transportation, storage and use of explosive material	Yes	For transporting and storing diesel, Oil and lubricants etc.	Chief Controller of Explosives
14	Minor Mineral and concession Rules	For opening new quarry.	Yes	Regulate use of minor minerals like stone, soil, river sand etc.	District Collector

S. No	Act / Rules	Purpose	Applicable Yes/ No	Reason for Applicability	Authority
15	Central Motor Vehicle Act, 1988	To check vehicular air and noise pollution.	Yes	This rule will be applicable to vehicles deployed for construction activities and construction Machinery.	Motor Vehicle Department
16	National Forest Policy, 1988	To maintain ecological stability through preservation and restoration of biological diversity.	No	This policy will be applicable if any eco sensitive feature exists in and around the investments	Forest Department, State Government and Ministry of Environment and Forests, Government of India
17	The Mining Act	The mining act has been notified for safe and sound mining activity.	Yes	The construction activities for investments will require aggregate. These will be procured through mining from approved quarries	Department of Mining, State Government

3.3 Applicable Laws and Regulations - Social

31 All strategic interventions on human development, spread across all social issues, need directives of policies and legal support to operationalise the appropriate actions. These policies and legislations help to overcome the constraints and support administrator, implementer, community and individual in delivery of justice. This section includes the National policies and Acts as detailed under:

National Policies and Acts

- i) National Tribal Policy, 2006
- ii) National Resettlement and Rehabilitation Policy, 2007
- iii) Land (Acquisition) Act 1894 (as amended)
- iv) Forest Rights Act, 2006

3.3.1 National Policies and Acts

The National Tribal Policy (2006)

32 The Policy has the following objectives:

Regulatory Protection

- Providing an environment conducive to the preservation of traditional and customary systems and regime of rights and concessions enjoyed by different

ST communities, and reconciliation of modes of socio-economic development with these.

- Preventing alienation of land owned by STs and restoring possession of wrongfully alienated lands.
- Protection and vesting of rights of STs on forestlands and other forest rights including ownership over minor forest produce (MFP), minerals and water bodies through appropriate legislations and conversion of all forest villages into revenue villages.
- Providing a legislative frame for rehabilitation and resettlement in order to minimize displacement, ensure that affected persons are partners in the growth in the zone of influence, provide for compensation of social and opportunity cost in addition to market value of the land and rights over common property (NPV).
- Empowerment of tribal communities to promote self-governance and self-rule as per the provisions and spirit of the *Panchayats* (Extension to the Scheduled Areas) Act, 1996.
- Protection of political rights to ensure greater and active participation of tribal peoples in political bodies at all levels.

National Resettlement and Rehabilitation Policy – 2007

33 The national policy on resettlement and rehabilitation represents a significant milestone in the development of a systematic approach to addressing resettlement. The policy establishes a Guideline for extending additional assistance to project-affected families, over and above the compensation for affected assets provided under the Land Acquisition (LA) Act.

34 This policy strikes a balance between the need for land for developmental activities and protecting the interests of land owners and others. The benefits under the new policy are available to all Affected Persons (AP) and families whose land, property or livelihood is adversely affected by land acquisition, involuntary displacement due to natural calamities, etc.

Land Acquisition Act, 1894 (As Modified from time to time)

35 The Act is applicable to the whole of India except the state of Jammu and Kashmir. The policy provides a broad guideline of procedure of land acquisition.

The Land Acquisition (LA) Act of 1984 is commonly used for acquisition of land for any public purpose. It is used at the State level with State amendments made to suit local requirements. Expropriation of and compensation for land, houses and other immovable assets are carried out under the Land Acquisition (Amendment) Act, 1984. The Act deals with compulsory acquisition of private land for public purpose. The LA Act does not contain any provision specifically dealing with resettlement including income restoration aspects.

TABLE 3.2 THE LAND ACQUISITION PROCESS

Legal Provision	Actions
Section 4	Draft prepared by requiring body, verified by the Ministry of Law, printing and proof reading. Publish in official gazette and two local newspapers; post notice locality No further land sales, transfers or subdivisions after notice Appoint Land Acquisition Officer (LAO) to survey land Notices under section 4(1) issued to individual owners and interested parties (one month)
Declaration of Public purpose	Government certifies that land is required for a public purpose Declaration is published Collector/ Deputy Commissioner receives order from Revenue Department, State Government Land appraisal begins (two weeks to a month)
Section 5(a) Enquiry	Enquire objections to LA Land owners and interested parties appear before LAO Revenue commissioner calls for comments of acquiring agency if objections are raised – (one to three months)
Section 6	State government issues notices LAO serves individual notice on all interested parties of government's intention to take possession of land Time and place set for claims to LAO Public notice given Collector or LAO investigate claims (12 months)
Section 9	LAO conducts on-site inquiry regarding area of LA and compensation payable
Section 11 and 12	Declaration of final award by Collector/Commissioner/State Government after inquiry of total valuation Notice of awards given to interested parties for payment of compensation Government can take possession of land and hand over to implementing agency (14 months)

Forest Rights Act, 2006

36 The Act basically does two things:

- Grants legal recognition to the rights of traditional forest dwelling communities, partially correcting the injustice caused by the forest laws.
- Makes a beginning towards giving communities and the public a voice in forest and wildlife conservation.

3.4 Other legislations applicable to construction activities

37 Construction stage generally involves equity, safety and public health issues. The construction agencies therefore will be required to comply with laws of the land, which include inter alia, the following:

- Workmen's Compensation Act 1923 (the Act provides for compensation in case of injury by accident arising out of and during the course of employment);
- Payment of Gratuity Act, 1972 (gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years);
- Employees PF and Miscellaneous Provision Act 1952 (the Act provides for monthly contributions by the employer plus workers);
- Maternity Benefit Act, 1951 (the Act provides for leave and some other benefits to women employees in case of confinement or miscarriage, etc.);
- Contract Labor (Regulation and Abolition) Act, 1970 (the Act provides for certain welfare measures to be provided by the contractor to contract labour);
- Minimum Wages Act, 1948 (the employer is supposed to pay not less than the Minimum Wages fixed by the Government as per provisions of the Act);
- Payment of Wages Act, 1936 (it lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers);
- Equal Remuneration Act, 1979 (the Act provides for payment of equal wages for work of equal nature to Male and Female workers and not for making discrimination against Female employees);
- Payment of Bonus Act, 1965 (the Act provides for payments of annual bonus subject to a minimum of 83.3% of wages and maximum of 20% of wages);

- Industrial Disputes Act, 1947 (the Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment);
- Industrial Employment (Standing Orders) Act; 1946 (the Act provides for laying down rules governing the conditions of employment);
- Trade Unions Act, 1926 (the Act lays down the procedure for registration of trade unions of workers and employers. The trade unions registered under the Act have been given certain immunities from civil and criminal liabilities);
- Child Labour (Prohibition and Regulation) Act, 1986 (the Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of child labour is prohibited in Building and Construction Industry);
- Inter-State Migrant Workmen's (Regulation of Employment and Conditions of Service) Act, 1979 (the inter-state migrant workers, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, travelling expenses from home to the establishment and back, etc.);
- The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and the Cess Act of 1996 (all the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act; the employer of the establishment is required to provide safety measures at the building or construction work and other welfare measures, such as canteens, first-aid facilities, ambulance, housing accommodation for Workers near the workplace, etc.);
- The Factories Act, 1948 (the Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours and rendering information-regarding accidents or dangerous occurrences to designated authorities);
- Hazardous Wastes (Management and Handling) Rules, 1989 (the Rules govern handling, movement and disposal of hazardous waste);

- Manufacture, Storage and Import of Hazardous Chemicals Rules 1989, amended 1994 and 2000 (the Rules provide indicative criteria for hazardous chemicals and require occupiers to identify major accident hazards and prepare on-site and off-site emergency plans).

Section 4 Environment and Social Management Framework

4.1 OBJECTIVES

38 There may be adverse impacts that have to be effectively managed during the planning, design, construction and operational phases of NGRBA investments. These impacts may have the potential to cause major and minor, and reversible and irreversible societal/ community damage; as well as result in project delays, incomplete implementation, partial achievement of the project development goals and, reputation risks to various stakeholders. Proper management is therefore necessary for smooth and effective project implementation.

39 The Objective of Environment and Social Management Framework (ESMF) is to ensure environmentally sustainable development in NGRBA's endeavour of Mission Clean Ganga by effective management of environmental and social issues in all the investments with a special focus on the following:

- ensure that all investments adhere to the national, state and local regulatory requirements during the design, implementation and operation stages
- ensure that best environmental and social practices are mainstreamed/ integrated during design, implementation and operation of the investments
- strive to enhance environmental conditions wherever feasible
- undertake to develop communication strategy, capacity building and training initiatives for all stakeholders such as the SPMGs, EAs, ULBs, NGOs and common citizens.

4.2 PURPOSE OF THE ESMF

40 The purpose of the ESMF is to facilitate the management of environmental and social issues of the river pollution mitigation investments. At this stage, although the portfolio of investments has been broadly identified, the specific investment projects, i.e. their size, type and location, are yet to be identified. Therefore, at this stage it is not possible to develop specific environment and social management plans for each of the specific investments. The specific project identification will be a need based/ demand-driven process, consistent with the overall objectives of 'National Mission Clean Ganga'. The Environment and Social Management

Framework (ESMF), therefore, would be used as an umbrella by the NGRBA program (the PMG and SPMGs) and all implementing agencies while preparing and/ or appraising, approving and executing the investments.

41 Environmental impacts: There may be adverse environmental impacts for which mitigation plans are essential. These impacts include direct, indirect, cumulative, and induced impacts in the project's area of influence. Each project needs to be scrutinized as to its type, location, scale, and sensitivity and the magnitude of its potential environmental impacts. Environmental impacts include those related to the natural environment (air, water, and land); human health and safety; and trans-boundary and global environmental aspects. Environmental guidelines – policies and requirements – seek to avoid, minimize, or mitigate adverse environmental impacts.

42 Social impacts: Project-related social impacts include displacement impacts and impacts to vulnerable groups. Broadly, this includes physical displacement (relocation, loss of residential land or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources or means of livelihood). If a project directly or indirectly affects the dignity, human rights, livelihood systems, or culture of SC/ ST/ BPL groups or affects the territories or natural or cultural resources. Social management plan seeks to avoid, minimize or mitigate these adverse impacts. Related to displacement impacts, if these adverse impacts cannot be avoided, then affected people should receive assistance/ compensation so that they are at least as well off as they were in the absence of the project.

43 Through the ESMF, the SPMGs and the PMG will also be implementing international good practices for managing social and environmental issues.

4.3 SCREENING AND CATEGORIZATION OF INVESTMENTS (DURING THE FEASIBILITY STUDY STAGE)

44 Each project is scrutinized as to its type, location, scale, and sensitivity and the magnitude of its potential environmental impacts. The extent of assessment required to identify and mitigate the impacts largely depends upon the complexities of project activities. The scrutiny and screening will be based on a

detailed Environment and Social Screening exercise, summarized in the following Format:

TABLE 4.1 SCREENING FORMAT

Environment and Social information format for screening			
	Project Title: Implementing agency: Project cost: Project components: Project location (Area/ district)		
	Screening Criteria	Assessment of category (High/ low)	Explanatory note for categorisation
1	Is the project in an eco-sensitive area or adjoining an eco-sensitive area? (Yes/No) If Yes, which is the area? Elaborate impact accordingly.		
2	Will the project create significant/ limited/ no social impacts? <ul style="list-style-type: none"> • Land acquisition resulting in loss of income from agricultural land, plantation or other existing land-use. • Land acquisition resulting in relocation of households. • Any reduction of access to traditional and river dependent communities (to river and areas where they earn for their primary or substantial livelihood). • Any displacement or adverse impact on tribal settlement(s). • Any specific gender issues. 		
3	Will the project create significant / limited / no environmental impacts during the construction stage? (Significant / limited / no impacts) <ul style="list-style-type: none"> • Clearance of vegetation/ tree-cover • Direct discharge of construction run-off, improper storage and disposal of excavation spoils, wastes and other construction materials adversely affecting water quality and flow regimes. • Flooding of adjacent areas • Improper storage and handling of substances leading to contamination of soil and water • Elevated noise and dust emission • Disruption to traffic movements • Damage to existing infrastructure, public utilities, amenities etc. • Failure to restore temporary construction sites 		

	<ul style="list-style-type: none"> • Possible conflicts with and/or disruption to local community • Health risks due to unhygienic conditions at workers' camps • Safety hazards during construction 		
4	<p>Will the project create significant / limited / no environmental impacts during the operational stage? (Significant / limited / no impacts)</p> <ul style="list-style-type: none"> • Flooding of adjacent areas • Impacts to water quality due to effluent discharge • Gas emissions • Safety hazards 		
5	<p>Do projects of this nature / type require prior environmental clearance either from the MOEF or from a relevant state Government department? (MOEF/ relevant State Government department/ No clearance at all)</p>		
6	<p>Does the project involve any prior clearance from the MOEF or State Forest department for either the conversion of forest land or for tree-cutting? (Yes/ No).</p> <p>If yes, which?</p>		
7	<p>Please attach photographs and location maps along with this completed Environmental Information Format For Screening.</p>		
Overall assessment			

*Detailed explanation/ justification for arriving at specific category (high/ low) to be provided in the specified column

45 The level of impact category (high/ low) shall be determined through a process of environmental and social screening as described above and shall be provided as part of the Feasibility Report, and has to be agreed by the SPMG.

4.4 ADDRESSING ENVIRONMENTAL AND SOCIAL IMPACTS (DURING PREPARATION OF THE DPR)

4.4.1 High impact categories

46 A proposed investment will be classified as High impact category, if it is likely to impact (adverse or moderate) the environmental and social aspects of the investments. The High Category investments will also include all those investments which require the mandatory environmental clearance as per the EIA

notification S.O 1533 (E) dated Sept 2006, published by Ministry of Environment and Forests.

- 47 The investments categorized as 'High' would require conducting an Environmental and Social Assessment (ESA) by an independent agency (other than the agency designing the project) and the scope of the assessment will be decided based on the nature of the investment and the environmental and social sensitivity of the area. The ESA shall examine all the potential negative and positive environmental and social impacts of the investment, compare them with those of feasible alternatives (including the "without investment" situation), and recommend any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance.
- 48 The ESA may include (a) a detailed description of the environmental and social condition of the project area; (b) an assessment of the potential impacts; (c) formulation of mitigation measures; and (d) preparation of an Environment and Social Management Plan. The ESA report will contain the following chapter scheme: (1) Introduction; (2) Description of the project; (3) Description of the environment; (4) Alternatives; (5) Anticipated environmental and social impacts and mitigation measures; (6) Socio-economic assessment; (7) Environment and Social Management Plan; (8) Public consultation and disclosure; and (9) Conclusions.

4.4.2 Resettlement Policy and Land Acquisition Framework (RPLAF)

- 49 PMG has developed Entitlement Matrix, which is in line with National R&R Policy 2007 and other applicable laws and Acts of the Government of India to address the issues related with affected persons.

R&R will be undertaken as per the entitlement matrix or State R&R policy where applicable, to address the issues related to the resettlement and rehabilitation of the affected persons.

This aims to resettle and rehabilitate the affected persons on account of its investments in a manner that they do not suffer from adverse effects and shall improve or at the minimum retain their previous standard of living, earning

capacity and production levels. It is also the endeavour of the NGRBA program that the resettlement shall minimize dependency and be sustainable socially, economically and institutionally. Special attention will be paid for the improvement of living standards of marginalized and vulnerable groups.

The broad principles of the R&R policy are as below:

- The adverse impacts on persons affected by the project would be **avoided** to the extent possible.
- Where the adverse impacts are unavoidable, the project-affected persons will be assisted in improving or regaining their standard of living. Vulnerable groups will be identified and assisted to improve their standard of living.
- All information related to resettlement preparation and implementation will be disclosed to all concerned, and community participation will be ensured in planning and implementation.
- Private negotiations will also be used for land acquisition as required.
- The persons affected by the project who does not own land or other properties but who have economic interest or lose their livelihoods will be assisted as per the broad principles brought out in this policy.
- Before taking possession of the acquired lands and properties, compensation and R&R assistance will be made to those who are available and willing to receive the entitlements in accordance with this policy.
- There would be no/or minimum adverse social, economic and environmental effects of displacement on the host communities but if needed specific measures would be provided.
- Broad entitlement framework of different categories of project-affected people has been assessed and is given in the entitlement matrix. Provision will be kept in the budget. However, anyone moving into the project area after the cut-off date will not be entitled to assistance.
- Appropriate grievance redress mechanism will be established at project level to ensure speedy resolution of disputes.
- All activities related to resettlement planning, implementation, and monitoring would ensure involvement of women. Efforts will also be made to ensure that vulnerable groups are included.

- All consultations with PAPs shall be documented. Consultations will continue during the implementation of resettlement and rehabilitation works.

As required, a Resettlement Action Plan will be prepared including a fully itemized budget and an implementation schedule.

Preparation of Resettlement Action Plans

50 Having identified the potential impacts of the relevant investments, the next step is to develop action plans to mitigate the impacts. The RAPs will provide the link between the impacts identified and proposed mitigation measures to realize the objectives of involuntary resettlement. The investment specific RAP will take into account magnitude of impacts and accordingly prepare a resettlement plan that is consistent with this framework before the sub-project is accepted for NGRBA's program financing. Any affected person will be assisted as provided in the National Policy or State Policy where applicable on resettlement and rehabilitation.

- a) The above plan will be prepared as soon as subproject is finalized, prior to PMG/SPMG's approval of corresponding civil works bid document.
- b) Investments that are not expected to have any land acquisition or any other significant adverse social impacts; on the contrary, significant positive social impact and improved livelihoods are exempted from such interventions.

Sub Project Approval

51 In the event that a subproject involves land acquisition against compensation or loss of livelihood or shelter, the implementing agency shall:

- a) not approve the subproject until a satisfactory RAP has been prepared and shared with the affected person and the local community; and
- b) not allow works to start until the compensation and assistance has been made available in accordance with the framework.

Procedure to be followed for Social Impact Assessment (SIA)

- 52 The EA will undertake a survey for identification of the persons and their families likely to be affected by the project. Every survey shall contain the following municipality or ward / village-wise information of, the project affected families:
- i. members of families who are residing, practicing any trade, occupation or vocation in the project affected area;
 - ii. Project Affected Families who are likely to lose their house, commercial establishment, agricultural land, employment or are alienated wholly or substantially from the main source of their trade occupation or vocation or losing any other immovable property.
 - iii. Agricultural labourers and non-agriculture labourers.
 - iv. Families belonging to scheduled caste and scheduled tribe categories
 - v. Vulnerable persons such as the disabled, destitute, orphans, widows, unmarried girls, abandoned women, or persons above the age of 50 years of age, who are not provided or cannot immediately be provided with alternative livelihood, and who are not otherwise covered as part of a family;
 - vi. Families that are landless (not having homestead land, agriculture land or ether homestead or agriculture land) and are below poverty line, but residing continuously for a period of not less than three years in the affected area preceding the date of declaration of the affected area;
 - vii. Losing access to private property or common property resources
- 53 The EA on completion of the survey will disseminate the survey results among the affected community. Based on the social impact assessment survey, EA will prepare an action plan to mitigate or minimize the adverse impacts as identified during the survey. The draft mitigation plan in form of resettlement action plan (RAP) will be again disseminated among the affected individuals/ community. The feedback received from the affected groups will be incorporated to the extent possible before finalization of the RAP.
- 54 Every-draft Resettlement Action Plan (RAP) prepared shall contain the following particulars namely.

- a) the extent of area to be acquired for the project, the name(s) of the corresponding village(s)/ municipality area and the method employed for acquiring land with the relevant documentation.
- b) village wise or municipality wise list of affected families and likely number of displaced persons by impact category
- c) family-wise and the extent and nature of land and immovable property in their possession indicating the survey numbers thereof held by such persons in the affected zone;
- d) Socio-economic survey of affected people including income/asset survey of APs.
- e) a list of agricultural labourers in such area and the names of such persons whose livelihood depend on agricultural activities;
- f) a list of persons who have lost or are likely to lose their employment or livelihood or who have been alienated wholly and substantially from their main sources of occupation or vocation consequent to the acquisition of land and / or structure for the project;
- g) information on vulnerable groups or persons for whom special provisions may have to be made;
- h) a list of occupiers; if any
- i) a list of public utilities and Government buildings which are likely to be affected;
- j) a comprehensive list of benefits and packages which are to be provided to project affected families by impact category;
- k) details of the extent of land available which may be acquired in settlement area for resettling and allotting of land to the project affected families;
- l) details of the basic amenities and infrastructure facilities which are-to be provided for resettlement;
- m) the entitlement matrix;
- n) the time schedule for shifting and resettling the displaced families in resettlement zones;
- o) grievance redressal mechanism;
- p) institutional mechanism for RAP implementation;
- q) monitoring and evaluation indicators and mechanism;
- r) budget; and

- s) Any other particulars as the Administrator for Resettlement and Rehabilitation may think fit to include for the information of the displaced persons.

Land Acquisition, R&R Benefits for Affected Families

55 In case land/ house is acquired, as per LA Act, 1894 the compensation will be paid to the land holders/ house owners as per provisions of the Act and the resettlement and rehabilitation (R&R) benefits shall be extended to all the affected families as per National R&R Policy, 2007 or State R&R policy where applicable. Any affected and/ or displaced family/ person will be assisted as per the provisions of the National Policy on Resettlement and Rehabilitation, 2007 and State R&R policy where applicable.

57 Land Acquisition Act 1894 will be as per the considerations given below:

- Market value of the land at the date of publication of notification under section 4 (1)
- Damage sustained by taking of standing crops, trees which may be on the land at the time of collector's taking possession.
- Damage due possession of land by collector, by reason of serving such land from his other land.
- Damage by reason of the acquisition injuriously affecting his other property, movable or immovable, in any other manner or earnings.
- Acquisition of land compels to change residence or place of business, the reasonable expense incidental to such change.
- Damage if any resulting from diminution of the profits of the land between the times of publication of declaration under section 6.

57 Provisions for R&R at the community level will be as follows:

- The common property resources and the community infrastructure shall be relocated in consultation with the community.
- During construction phase alternative access shall be provided in case of loss of access to private land / or common resource property.

58 Any unforeseen impacts shall be document and mitigated based on the principles agreed upon in policy Guideline.

The following is the entitlement matrix, as per the NPR&R 2007:

TABLE 4.2 ENTITLEMENT MATRIX

Type of Impact/Loss	Unit of Entitlement	Entitlements as per Policy
1 Agricultural Land		
Acquisition of agricultural land	Land Holder	<ul style="list-style-type: none"> • Each affected family owning agricultural land in the affected area and whose entire land has been acquired or lost, may be allotted in the name of the <i>khatedar</i>(s) in the affected family, agricultural land or cultivable wasteland to the extent of actual land loss by the <i>khatedar</i>(s) in the affected family subject to a maximum of one hectare of irrigated land or two hectares of un-irrigated land or cultivable wasteland, if Government land is available in the resettlement area. This benefit shall also be available to the affected families who have, as a consequence of the acquisition or loss of land, been reduced to the status of marginal farmers. (NPR&R 2007, Ref 7.4.1) This benefit shall also be available to the affected families who have, as a consequence of the acquisition or loss of land, been reduced to the status of marginal farmers. (NPR&R 2007, Ref 7.4.1) • In case of allotment of wasteland or degraded land in lieu of the acquired land, each <i>khatedar</i> in the affected family shall get a one-time financial assistance of such amount as the appropriate Government may decide but not less than fifteen thousand rupees per hectare for land development. (NPR&R, 2007; Ref 7.9.1) • In case of allotment of agricultural land in lieu of the acquired land, each <i>khatedar</i> in the affected family shall get a one-time financial assistance of such amount as the appropriate Government may decide but not less than ten thousand rupees, for agricultural production (NPR&R, 2007 Ref 7.9.2) • In case of a project involving land acquisition on behalf of a acquiring body, each affected family which is involuntarily displaced shall get a monthly subsistence allowance equivalent to twenty-five days minimum agricultural wages per month for a period of one year from the date of displacement. (NPR&R, 2007; Ref 7.16) • Each affected family that is displaced and has cattle, shall get financial assistance of such amount as the appropriate Government may decide but not less than fifteen thousand rupees, for construction of cattle shed. (NPR&R, 2007; Ref 7.10) • In case of a project involving land acquisition on behalf of an acquiring body, the stamp duty and other fees payable for registration of the land or house allotted to the affected families shall be borne by the acquiring body. (NPR&R,

Type of Impact/Loss	Unit of Entitlement	Entitlements as per Policy
2007; Ref 7.6)		
2 House		
i) Acquisition of House of non BPL category	Affected Family	<ul style="list-style-type: none"> • May be allotted free of cost house site to the extent of actual loss of area of the acquired house but not more than two hundred and fifty square metre of land in rural areas, or one hundred and fifty square metre of land in urban areas, as the case may be, for each nuclear family. In urban areas, a house of up to one hundred square metre carpet area may be provided in lieu thereof (NPR&R, 2007;Ref 7.2) • Right to salvage material from the demolished structures • Three months' notice to vacate structures • One-time financial assistance of such amount as the appropriate Government may decide but not less than ten thousand rupees, for shifting of the family, building materials, belongings and cattle. (NPR&R, 2007; Ref 7.11) • Each affected family that is displaced and has cattle, shall get financial assistance of such amount as the appropriate Government may decide but not less than fifteen thousand rupees, for construction of cattle shed. (NPR&R, 2007; Ref 7.10) • Each affected person who is rural artisan, small trader or self-employed person who has been displaced shall get a one-time financial assistance of such amount as the appropriate Government may decide but not less than (Rs. 25,000/-) twenty-five thousand rupees, for construction of working shed or shop. (NPR&R, 2007;Ref 7.12) • In case of a project involving land acquisition on behalf of an acquiring body, the stamp duty and other fees payable for registration of the land or house allotted to the affected families shall be borne by the acquiring body. (NPR&R, 2007; Ref 7.6)
ii) Acquisition of House of BPL category	Affected Family	<ul style="list-style-type: none"> • May be allotted free of cost house site to the extent of actual loss of area of the acquired house but not more than two hundred and fifty square metre of land in rural areas, or one hundred and fifty square metre of land in urban areas, as the case may be, for each nuclear family. In urban areas, a house of up to one hundred square metre carpet area may be provided in lieu thereof (NPR&R, 2007;Ref 7.2) • Right to salvage material from the demolished structures • Three months' notice to vacate structures • In case house site is not given in rural/urban areas or house is not given in urban areas, affected family shall get a suitable one-time financial assistance for house construction,

Type of Impact/Loss	Unit of Entitlement	Entitlements as per Policy
		<p>and the amount shall not be less than what is given under any programme of house construction by the Govt. of India, for example Indira Awas Yojana or Integrated Housing Slum Development Programme (IHSDP)/ Basic Services for Urban Poor (BSUP) in urban areas</p> <ul style="list-style-type: none"> • One-time financial assistance of such amount as the appropriate Government may decide but not less than ten thousand rupees, for shifting of the family, building materials, belongings and cattle. (NPR&R, 2007; Ref 7.11) • Each affected family that is displaced and has cattle, shall get financial assistance of such amount as the appropriate Government may decide but not less than fifteen thousand rupees, for construction of cattle shed. (NPR&R, 2007; Ref 7.10) • Each affected person who is rural artisan, small trader or self-employed person who has been displaced shall get a one-time financial assistance of such amount as the appropriate Government may decide but not less than (Rs. 25,000/-) twenty-five thousand rupees, for construction of working shed or shop. (NPR&R, 2007; Ref 7.12) • In case of a project involving land acquisition on behalf of an acquiring body, the stamp duty and other fees payable for registration of the land or house allotted to the affected families shall be borne by the acquiring body. (NPR&R, 2007; Ref 7.6)
iii)BPL without homestead land and residing in the area for not less than three years	Affected Family	<ul style="list-style-type: none"> • Has been residing in the affected area continuously for a period of not less than three years preceding the date of declaration of the affected area and which has been involuntarily displaced from such area, shall be entitled to a house of minimum one hundred square metre carpet area in rural areas, or fifty square metre carpet area in urban areas (which may be offered, where applicable, in a multi-storied building complex), as the case may be, in the resettlement area. Provided that any such affected family, which opts not to take the house offered, shall get a suitable one-time financial assistance for house construction, and the amount shall not be less than what is given under any programme of house construction by the Govt. of India, for example Indira Awas Yojana or Integrated Housing Slum Development Programme (IHSDP)/ Basic Services for Urban Poor (BSUP) in in urban areas (NPR&R, 2007; Ref 7.3) • One-time financial assistance of such amount as the appropriate Government may decide but not less than ten thousand rupees, for shifting of the family, building

Type of Impact/Loss	Unit of Entitlement	Entitlements as per Policy
		<p>materials, belongings and cattle. (NPR&R, 2007; Ref 7.11)</p> <ul style="list-style-type: none"> • Each affected family that is displaced and has cattle, shall get financial assistance of such amount as the appropriate Government may decide but not less than fifteen thousand rupees, for construction of cattle shed. (NPR&R, 2007; Ref 7.10) • Each affected person who is rural artisan, small trader or self-employed person who has been displaced shall get a one-time financial assistance of such amount as the appropriate Government may decide but not less than (Rs. 25,000/-) twenty-five thousand rupees, for construction of working shed or shop.(NPR&R, 2007;Ref 7.12) • In case of a project involving land acquisition on behalf of an acquiring body, the stamp duty and other fees payable for registration of the land or house allotted to the affected families shall be borne by the acquiring body. (NPR&R, 2007; Ref 7.6)
3 Livelihood losses		
i) Rural artisan, small trader or self-employed Person displaced	Each affected person	<ul style="list-style-type: none"> • Will get a one-time financial assistance of such amount as the appropriate Government may decide but not less than (Rs. 25,000/-) twenty-five thousand rupees, for construction of working shed or shop.(NPR&R, 2007;Ref 7.12)
ii) Employment Assistance	Affected Family	<ul style="list-style-type: none"> • The acquiring body shall give preference to the affected families – at least one person per nuclear family - in providing employment in the project, subject to the availability of vacancies and suitability of the affected person for the employment; • Wherever necessary, the acquiring body shall arrange for training of the affected persons, so as to enable such persons to take on suitable jobs; • The acquiring body shall offer scholarships and other skill development opportunities to the eligible persons from the affected families as per the criteria as may be fixed by the appropriate Government; • The acquiring body shall give preference to the affected persons or their groups or cooperatives in the allotment of outsourced contracts, shops or other economic opportunities coming up in or around the project site; and • The acquiring body shall give preference to willing landless labourers and unemployed affected persons while engaging labour in the project during the construction phase.(NPR&R, 2007;Ref 7.13.1)
4 Other Benefits		

Type of Impact/Loss	Unit of Entitlement	Entitlements as per Policy
i) Additional Assistance to vulnerable persons (Disabled, destitute, orphans, widows, unmarried girls, abandoned women, or persons above fifty years of age; who are not provided or cannot immediately be provided with alternative livelihood, and who are not otherwise covered as part of a family (Ref 6.4 V))	Each Person	The project authorities shall, at their cost, arrange for annuity policies that will pay a pension for life to the vulnerable affected persons of such amount as may be prescribed by the appropriate Government subject to a minimum of five hundred rupees per month. (NPR&R, 2007;Ref 7.17)
ii) Additional assistance for Tribal families	Affected Family	<ul style="list-style-type: none"> • Preference in allotment of land –for-land for schedule caste families (NPR&R, 2007;Ref 7.21.3) • In case of land being acquired from members of the Scheduled Tribes, at least one-third of the compensation amount due shall be paid to the affected families at the outset as first instalment and the rest at the time of taking over the possession of the land. (NPR&R, 2007;Ref 7.21.4) • In case of a project involving land acquisition on behalf of an acquiring body, each Scheduled Tribe affected family shall get an additional one-time financial assistance equivalent to five hundred days minimum agricultural wages (500 MAW) for loss of customary rights or usages of forest produce. (NPR&R, 2007;Ref 7.21.5) • In case of a project involving land acquisition on behalf of an acquiring body, the Scheduled Tribes affected families resettled out of the district will get twenty-five per cent. higher rehabilitation and resettlement benefits in monetary terms (NPR&R, 2007;Ref 7.21.8)
iii)Who have not been provided agricultural land; or employment	Affected family	<ul style="list-style-type: none"> • Shall be entitled to a rehabilitation grant equivalent to seven hundred fifty days minimum agricultural wages (750 MAW) or such other higher amount as may be prescribed by the appropriate Government (NPR&R, 2007;Ref 7.14)
5 Exemptions from stamp duty etc.		
		In case of a project involving land acquisition on behalf of an acquiring body, the stamp duty and other fees payable for registration of the land or house allotted to the affected families shall be borne by the acquiring body. (NPR&R, 2007; Ref 7.6)
6 Trees and standing crops		
Trees on land being acquired	Land holders	Market value of the trees to be computed as per the provisions of Horticulture and Forest Department.
Standing crops at the time of acquisition , if any	Land holders	<ul style="list-style-type: none"> • Advance notice to harvest crops • Market value of standing crops to be computed as per

Type of Impact/Loss	Unit of Entitlement	Entitlements as per Policy
		provisions of Agriculture Department.

59 According to the assessment of the preliminary list of prioritized works, there may be need for private land acquisition in some cases which could result in involuntary displacement and loss of livelihood. However, project involuntary resettlement is likely to be of small scale and would not trigger the need for a full resettlement action plan. Nevertheless, as a precaution, the classification of subprojects of the ESMF describes actions and procedures to be followed in case any involuntary displacement does occur. In the event that involuntary displacement takes place, the principles and procedures defined in the Framework will apply.

60 Once the location of the works is known during project implementation, individual resettlement or land acquisition plans will be prepared for each sub-project. The Resettlement Action Plans will be reviewed and approved by SPMG/PMG before being implemented.

61 During DPR preparation, analysis of alternatives will be carried out to avoid or reduce involuntary acquisition of private land.

Immediately after FR approval and in parallel with DPR preparation, the EA along with the ULB would initiate land acquisition process for the project. This would facilitate identification of the land, its survey and preliminary cost estimation so that the State Govt. is in readiness to issue the appropriate notification under prevalent LA Act upon approval of DPR for speedy acquisition of the land.

4.4.3 Tribal Management Framework (TMF)

62 Though to the extent possible, private land owned by a tribal family will not be acquired, as part of ESMF, a Tribal Management Framework (TMF) is being prepared. The TMF aims at effectively promoting participation of tribal families throughout the project cycle. The general objective of the TMF is the inclusion of tribal communities in the project in order to achieve the highest possible positive impact of the interventions to improve their quality of life, throughout

strengthening of their organization, self-management, and integral capacity of their members. The specific objectives are to ensure that: (a) works are culturally appropriate (b) works and services provided do not inadvertently induce inequality by limiting project benefits to the elite elements of the community, (c) the project engages with communities through a consultation process appropriate to the local cultural context and local decision making process; and (d) establish appropriate information-, communication-, and diversity-training strategies with the different TPs and communities in all stages of the project.

Objectives

This framework is based on the National Tribal Policy 2006 of Government of India. The principal objectives of the framework are to:

- (vi) Ensure that project engages in free, prior, and informed consultation with the tribal community wherever they are affected.
- (vii) ensure that project benefits are accessible to the tribal community living in the project area
- (viii) avoid any kind of adverse impact on the tribal community to the extent possible and if unavoidable ensure that adverse impacts are minimized and mitigated
- (ix) ensure tribal peoples participation in the entire process of preparation; implementation and monitoring of the sub project activities
- (x) minimize further social and economic imbalances within communities; and
- (xi) Develop appropriate training / income generation activities in accordance to their own defined needs and priorities.

63 The grievance if any will be addressed as per the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, which recognizes the rights of forest-dwelling Scheduled Tribes and other traditional forest dwellers over the forest areas inhabited by them and provides a Guideline for it.

4.4.4 Gender Assessment and Development

64 Gender Development plan is being designed under the project as part of ESMF which will help analyze gender issues during the preparation stage of sub project and design interventions. At the sub project level, gender analysis will be part of

the social assessment and the analysis will be based on findings from gender specific queries during primary data collection process and available secondary data. The quantitative and qualitative analysis will bring out sex disaggregated data and issues related to gender disparity, needs, constraints, and priorities; as well as understanding whether there is a potential for gender based inequitable risks, benefits and opportunities. Based on the specific interventions will be designed and if required gender action plan will be prepared. The overall monitoring framework of the project will include sex disaggregated indicator and gender relevant indicator.

The participation of beneficiaries and focus on poverty reduction are two other key determinants of the effectiveness and sustainability of any project. Any project must address the constraints on women's participation in project design, construction, operation and maintenance (O & M), training, and monitoring and evaluation (M & E). The project must also focus on the linkage between gender and poverty, by identifying, for example, households headed by females and those households' special needs. An adaptive, learning, and process-oriented approach works better than a blue print approach; continuous dialogue between the EA and the beneficiaries is therefore important. Project beneficiaries are likely to have a stronger sense of ownership when the project gives them enough time, design flexibility, and authority to take corrective action. In this way, they find it easier to incorporate their earlier learning and negotiate with project staff and service providers. Therefore, a mechanism must be built into the project to allow such two-way interactions between the beneficiaries and the service providers.

Gender analysis will be an integral part of the initial social assessment at the screening stage itself. The issues identified can be scaled up during the feasibility and detailed analysis can be carried out during the DPR stage.

- 65 The project designs should be gender responsive based on the gender analysis, and should be included in the DPR. The findings and recommendations from the gender analysis during project planning and feedback from beneficiaries during implementation must be discussed thoroughly to determine the need for further action. Listed below are the key action points:

- 66 Develop a feedback mechanism in which both male and female have a voice. Identify organizations that could facilitate women's participation during implementation and M & E.
- 67 Document the gender-responsive design features in the DPR and include covenants in the loan agreement to ensure gender-sensitive project design mechanisms to be complied by the executing agency

4.4.5 Consultation and Information Disclosure

Consultation

- 68 The Consultation process envisages involvement of all the stakeholders' at each stage of project planning and implementation. The EA /SPMG will be responsible for ensuring participation of the community at sub-project level. Involvement of the community is not limited to interactions with the community but also disclosing relevant information pertaining to the project tasks. Community participation shall be undertaken at the following stages:

- Sub Project identification stage - to sensitize the community about the project and their role;
- Planning Stage - for disseminating information pertaining to the project, work schedule and the procedures involved; finalisation of project components with identification of impacts, entitled persons, mitigation measures; and Grievance Redressal; and

Implementation Stage - for addressing temporary impacts during construction and monitoring for transparency in the project implementation

Identification Stage

- 69 Dissemination of project information to the community and relevant stakeholders is to be carried out by the EA at this stage of the project initiative. The community at large shall be made aware of the project alternatives and necessary feedback is to be obtained. This should include the process being followed for prioritisation of the identified investments. Community and other stakeholders should be involved in the decision making to the extent possible. Information generated at this stage should be documented for addressal of queries arising out of the Right to Information Act, 2005.

Project Planning Stage

- 70 Sub-project information is to be distributed amongst the community towards increasing their awareness and their roles and responsibilities. Planning stage is intended to be an interactive process with the community at least in two stages. Initially while finalizing the best fit alternative to a sub-project and second at the finalisation of the detailed designs. This would be a joint responsibility of the consultants undertaking the design if not carried out by the EA in house and the EA itself.
- 71 Consultations with Project Affected Persons and their profiling are mandatory as per the requirements of SIA and preparation of RAP. This needs to be done as socio-economic and census surveys as part of the detailed designs. Consultations with respect to and cultural aspects are to be carried out as part of the Social Impact Assessments for all alternatives and the selected alternative sub-project option.

Implementation Stage

- 72 Consultations as part of the implementation stage would be direct interactions of the implementation agency with the Project Affected Persons. These would comprise of consultations towards relocation of the PAPs, relocation of cultural properties, and towards addressal of impacts on common property resources (CPRs) such as water bodies, places of religious importance, community buildings, trees etc.
- 73 With the implementation of the R&R provisions in progress, consultations and information dissemination is to be undertaken to let the affected persons informed of the progress. Implementation stage also involves redressal of grievances in case of R&R aspects as well as relocation of common property resources through the grievance redressal mechanisms. These would usually be one to one meeting of PAP or community representatives with the grievance redressal committees established for the project.

Information Disclosure

- 74 The mechanism of information dissemination should be simple and be accessible to all. Two of the important means that have been followed until now include briefing material and organization of community consultation sessions. The briefing material (all to be prepared in local language) can be in the form of (a)

brochures (including project information, land requirements and details of entitlements including compensation and assistance to be given to the PAPs) that can be kept in the offices of local self-government (municipal office in case of urban area and gram panchayat office in case of rural area) and EA;(b) posters to be displayed at prominent locations and (c) leaflets that can be distributed in the impacted zone of the sub project. Consultation meetings should also be organized at regular intervals by the EA to acquaint the PAPs of the following:

- Timeline and progress of the project;
- Information on compensation and entitlements;
- Information on land acquisition and market valuations of property;
- Time line for acquisition.

75 Also, opinion and consensus of the community needs to be sought for common and cultural property relocation. Information disclosure procedures are mandated to provide citizen centric information as well as all documentation necessary for addressing any queries under Right to Information Act that came into effect from October 2005. Disclosure of information will enhance governance and accountability specifically with respect to strengthening of monitoring indicators to help NGRBA program.

76 This Information Disclosure Policy is intended to ensure that information concerning the NGRBA program, activities will be made available to the public in the absence of a compelling reason for confidentiality. Information shall be provided in a timely and regular manner to all stakeholders, affected parties, and the general public. Access by the public to information and documentation held or generated by PMG and EAs will facilitate the transparency, accountability, and legitimacy as well as operations overseen by it. As a part of its disclosure policy, all documents shall be made available to the public in accordance with relevant provisions of the RTI Act, except when otherwise warranted by legal requirements. A designated Information Officer shall be responsible for ensuring timely and complete dissemination in accordance with this policy.

Information to be disclosed

77 The Table below specifies the type of additional information and frequency of dissemination for investments which are financed either from domestic or donors'

funds. In addition to the information specified in the table, the following information shall also be displayed / disseminated, wherever applicable.

- Project specific information need to be made available at each contract site through public information kiosk
- Project Information brochures shall be made available at all the construction sites as well as the office of implementation agency and the office of Engineer in charge.
- Reports and publications, as deemed fit, shall be expressly prepared for public dissemination e.g., English versions of the SIA and RAP and Executive Summary of SIA and RAP in local language.
- Wherever civil work will be carried out a board will be put up for public information which will disclose all desired information to the public, for greater social accountability.
- All information will be translated into local language and will be disclosed to the public through the *Panchayat*, District Magistrate’s office, concerned EA offices, websites of PMG and SPMGs.

TABLE 4.3 INFORMATION TO BE DISCLOSED

Topic	Documents to be disclosed	Frequency	Where
Resettlement, Rehabilitation and Land Acquisition	Resettlement Action Plan (RAP).	Once in the entire project cycle. But to remain on the website and other disclosure locations throughout the project period.	On the website of PMG, SPMG and EAs The client would make the RAP available at a place accessible to displaced persons and local NGOs, in a form, manner, and language that are understandable to the PAPs in the following offices: DM’s Office State and District Libraries Local municipal and <i>gram panchayat</i> office Office of the contractor Office of the EA
	Resettlement & Rehabilitation Policy translated in local language	Once in the entire project cycle.	Distributed among Project Affected Persons (PAP)

Topic	Documents to be disclosed	Frequency	Where
	Information regarding impacts and their entitlements in local language	Once at the start of the project and as and when demanded by the PAP.	Through one-to-one contact with PAPs. Community consultation List of PAPs with impacts and entitlements to be pasted in the EA office and website of SPMG and EAs
	R&R and LA monthly progress report.	10th day of every month	Website of EA. Hard copy in the office of EA and contractor in local language
	RAP Impact Assessment Report	At midterm and end of the RAP implementation	PMG, SPMG and EA's website in local language.
	Land Acquisition notifications	As required under the LA Act	SPMG and EA's website. Hard copy in the office of EA and contractor in local language
	Grievance redressal process.	Continuous process throughout the project cycle.	On the web sites of PMG, SPMG, EAs Hard copies in local language in the following offices: DM's Office Local municipal and <i>gram panchayat</i> office Office of the contractor Office of the EA; Also PAPs to be informed on one to one contact by EAs
Public Consultation	Minutes of Formal Public Consultation Meetings	Within two weeks of meeting	On the web sites of PMG/SPMG, EAs Hard copies in local language in the following offices: DM's Office Local municipal and <i>gram panchayat</i> office Office of the contractor Office of the EA

Stakeholder mapping

78 Through the formal and informal consultation, following stakeholder mapping has been done, identifying their interests concerned with the project activities.

TABLE 4.4 STAKEHOLDER MAPPING

Stakeholder Category	Interests	Potential/Probable impacts
Primary stakeholders		
Project affected people	Access to the facility, Project entitlement, Time-bound delivery of benefits, enhanced quality of life	(+/-)
Beneficiaries	Access to the facility, Project entitlement, Time-bound delivery of benefits, enhanced quality of life	(+/-)
Secondary stakeholders		
PMG; SPMG; Municipalities; EAs (For e.g., Uttarakhand Peyjal Nigam, UP Jal Nigam, Bihar Urban Infrastructure Development Corporation, Urban Development Department, Kolkata Metropolitan Development Authority)	Project implementation, Contracting; Project management, Monitoring and evaluation	(+/-)
NGOs, CSOs, Research institutes (GB Pant Institute of Himalayan Environment and Development, PSI, Shree Hari Ganga Samiti, IIT Kanpur, Ganga Sewak Samaj, WWF, CEE, Centre for flood management studies, Krishi Gram Vikas Kendra, IIT Kharagpur, Calcutta University, Ramakrishna Mission)	Development, Community participation, and Community welfare	(+/-)

This is a tentative mapping is likely to change during the project implementation. Each of these stakeholders will be part of the consultation process and their views will be incorporated in to the project design. The key stakeholders in can be grouped into two categories viz., primary and secondary. Their respective roles are presented below:

Primary Stakeholders

79 Project Affected Persons (PAPs) have the following roles:

- i) Participate in public meetings and identify alternatives to avoid or minimise displacement
- ii) Assist DPR consultants and NGOs in developing and choosing alternative options for relocation and income generation
- iii) Participate in census survey and meetings with host population
- iv) Provide inputs to entitlement provisions, thus assisting in preparation of the resettlement action plan
- v) Participate in grievance redress as members of grievance redress cells (GRC)
- vi) Decide on relocation and management of common properties
- vii) Labour and other inputs in the project
- viii) Members of implementation committee

80 Beneficiaries and Host Population has the following roles:

- i) Assist DPR consultants and NGOs in data collection and design
- ii) Provide inputs to site selection
- iii) Identify possible conflict areas with PAPs
- iv) Identify social and cultural facilities needed at resettlement sites

- v) Assist in identification and design inputs for IG schemes
- vi) Help develop consultation process between hosts and PAPs.
- vii) Manage common property
- viii) Participate in local committees.
- ix) Assist PAPs in integration with hosts.

Secondary Stakeholders

81 PMG, SPMGs, EAs, Municipalities have the following roles:

- i) Establish separate cell for social development
- ii) Notification at various stages for land acquisition and joint measurement of land to be acquired along with the revenue department
- iii) Design and approval of resettlement policy
- iv) Coordinate with line departments such as telephone, state electricity board, public health engineering department and forest department for shifting of utilities and cutting of trees
- v) Participate with NGOs in verification survey of PAPs and categorisation of PAPs
- vi) Participate in consultations with PAPs and beneficiaries
- vii) Designing and distribution of ID cards along with NGO
- viii) Coordinate and facilitate relocation of displaced persons including designing and construction of resettlement colony / vendor market; provision of basic amenities; distribution of plots / houses / to residential and/or commercially displaced persons
- ix) Coordinate with NGO in identifying land for relocation of common property resources
- x) Coordinate with civil construction contractor to relocate common property resources
- xi) Permission and liaison with line departments for provision of basic amenities in resettlement colonies, land acquisition and income restoration schemes;
- xii) Coordinate with revenue department for facilitating disbursement of compensation and resettlement and rehabilitation assistances
- xiii) Monitoring of physical and financial progress
- xiv) Approval of micro plans
- xv) Participate in training programmes for income restoration organized by NGOs
- xvi) Consult with panchayat and block office to facilitate inclusion of PAPs' name for poverty alleviation schemes of government of India.

82 NGOs have following roles:

- i) Develop rapport with PAPs and between PAPs and EAs
- ii) Verification of PAPs
- iii) Consultations with the community
- iv) Assess the level of skills and efficiency in pursuing economic activities, identify needs for training and organise programmes either to improve the efficiency and/or to impart new skills
- v) Assist PAP in receiving rehabilitation entitlements due to them
- vi) Motivate and guide PAP for proper utilisation of benefits under R&R policy provisions

- vii) Assist PAPs in obtaining benefits from the appropriate development programmes.
- viii) Help PAPs in increasing their farm income through provision of irrigation facility or improving farm practices, and
- ix) Ensure marketing of produce particularly those under self-employment activities.
- x) Complete the consultation at the community level and provide support by describing the entitlements to the entitled persons (EPs) and assisting them in their choices
- xi) Accompany and represent the EPs at the Grievance Redress Committee meeting.
- xii) Assist EPs to take advantage of the existing government housing schemes and employment and training schemes that are selected for use during the project, and
- xiii) Promote location specific Community Based Organisations (CBOs) of PAPs to handle resettlement planning, implementation and monitoring.
- xiv) Create awareness among PAPs of HIV/AIDS, trafficking of women and child, child labour, health and hygiene,

4.4.5 Low impact categories

83 Low impact category investments are those which are likely to cause minimal or no adverse environmental impacts on human populations or the physical environment. The impacts in case of low category investments are largely localized and are temporary in nature. In such cases, detailed ESA would not be required.

84 These investments would require the preparation of an Environmental and Social Mitigation Plan as a part of the DPR either as a separate chapter or a volume (as needed), analysing the environmental and social issues and providing the corresponding mitigation measures. There will also be a separate section in the summary of the document mentioning the key mitigation measures proposed through the ESMP.

A Guidance Note for carrying out ESA is provided in Annex I, and an outline Environment and Social Management Plan for low impact category investments is provided in Annex II. However, during the project preparation, these measures shall be validated with actual site conditions and updated to make these more project-specific.

All ESAs, ESMPs, and RAPs of all investments will be shared with the SPMGs for review and clearance. The PMG and SPMGs may obtain expert opinion as necessary for reviewing environmental and social screening, ESAs, ESMPs and RAPs.

85 The EA/DPR consultant will prepare the ESMP in accordance with the specifications and conditions included in the bid documents. The generic terms of reference for the scope of DPRs would be suitably amended in each case in accordance with the screening and assessment provided in the FR.

4.5 Stakeholder Consultations and Disclosure of ESA

86 Planning and design of all the investments will include adequate consultations with the project-affected groups and other stakeholders and will specifically focus on the project's environmental and social impacts. For High impact category investments, the consultation with these groups shall be carried out at least twice: (a) shortly after screening and before the terms of reference for the ESA are finalized; and (b) once a draft ESA report is prepared. In addition, such groups will be consulted throughout project implementation as necessary to address ESA-related issues that affect them. This will enable to elicit and address the concerns of the stakeholders and address them upfront in the project feasibility and design of the project.

87 In order to facilitate meaningful consultations and also effective participation of the stakeholders in the project, all the project related information will be shared with the likely project-affected groups and local NGOs, in a timely manner prior to consultation and in a form and language that are understandable and accessible to the groups being consulted.

88 In case of High impact category investments, a summary of the proposed project's objectives, description, and potential impacts will be provided for the initial consultation. For consultation after the draft ESA report is prepared, a summary of the ESA's conclusions will be provided. In addition, the draft ESA report will be made available at all relevant public locations, accessible to project-affected groups and the stakeholders. The ESA report will also be disclosed in website of the SPMGs and PMG.

4.6 Environmental Regulatory Compliance

89 In addition to the above, the investments should also comply with all the applicable environmental regulations and should secure required clearances / authorizations. Tables **Table 4.5** and **4.6** provide a summary of such clearances and permissions.

**TABLE 4.5 ENVIRONMENTAL REGULATORY REQUIREMENTS FOR
NGRBA INVESTMENTS**

S. No.	Type of Clearance	Applicability	Project Stage	Responsibility	Time Required
1	Environmental Clearance from MoEF/SIAA	Applicable for select investments	Pre-Construction	EA	Not Applicable
2	Forest Clearance for land diversion	For forest land acquisition	Pre-Construction	EA	6-8 Months
3	Tree felling permission	For roadside tree cutting, in case sewers are to be laid	Pre-construction	EA	15 days
4	NOC and consents under Air, Water & Environment Act and noise rules from SPCB	For establishment of construction camp.	Construction stage (Prior to initiation of any work)	Contractor	2-3 Months
5	NOC and consents under Air, Water & Environment Act and noise rules from SPCB	For operating construction plant, crusher, batching plant etc.	Construction stage (Prior to initiation of any work)	Contractor	1-2 Months
6	Explosive License from Chief Controller of Explosives,	For storing fuel oil, lubricants, diesel etc. at construction camp	Construction stage (Prior to initiation of any work)	Contractor	2-3 Months
7	Permission for storage of hazardous chemical from CPCB	Manufacture storage and Import of Hazardous Chemical	Construction stage (Prior to initiation of any work)	Contractor	2-3 Months
8	Quarry Lease Deed and Quarry License from State Department of Mines and Geology	Quarry operation (for new quarry)	Construction stage (Prior to initiation of any work)	Contractor	2-3 Months
9	Permission for extraction of ground water for use in road construction activities from State Ground Water board	Extraction of ground water	Construction stage (Prior to initiation of any work)	Contractor	2-3 Months
10	Permission for use of water for construction purpose from irrigation department	Use of surface water for construction	Construction stage (Prior to initiation of any work)	Contractor	2-3 Months
11	Labour license from labour commissioner office	Engagement of Labour	Construction stage (Prior to initiation of any work)	Contractor	2-3 Months

TABLE 4.6 ENVIRONMENTAL REGULATORY COMPLIANCE DURING CONSTRUCTION AND OPERATION OF NGRBA INVESTMENTS

S. No	Project Portfolio	Applicable Legislations	Obligations	Responsibility
A Sewerage & Sanitation Investments				
1.	Laying entirely new sewer Net Work or extension to existing network including providing house connections and gravity based interception and diversion arrangements to drains carrying sanitary sullage/dry weather flow	None	<ul style="list-style-type: none"> • Ensure Air and Noise Quality is within stipulated limits of SPCB's • Ensure minimum hindrance to traffic, pedestrians and minimum interruption to services 	<ul style="list-style-type: none"> • Contractor during construction and operating agency during operation & maintenance • ULB/EA/Contractor
2.	Sewerage Network and Pumping Stations	Air Act, 1981 & Noise Rules as per EP Act, 1986	<ul style="list-style-type: none"> • Ensure Air and Noise Quality is within stipulated limits of SPCB's 	<ul style="list-style-type: none"> • Contractor during construction and operating agency during operation & maintenance • ULB/EA/Contractor
3.	Sewerage Network, Pumping Station and Treatment Plant	Water Act, 1974 Hazardous Wastes (Management and Handling) Amendment Rules, 2000	<ul style="list-style-type: none"> • Secure Consent to establish and Operate for sewage treatment plant from SPCBs and Ensure Air and Noise quality is within the stipulated limits of SPCB and CPCB 	<ul style="list-style-type: none"> • Contractor during construction and operating agency during operation & maintenance • ULB/EA/Contractor
4.	Low Cost Sanitation	None	<ul style="list-style-type: none"> • Ensure Air and Noise Quality is within stipulated limits of SPCB's • Ensure minimum hindrance to traffic, pedestrians and minimum interruption to services 	
5.	Generators at Sewage Pumping Stations and Sewage Treatment Plant	Air Act 1981 & Noise Rules as per EP Act, 1986	<ul style="list-style-type: none"> • Secure Consent to establish and Consent to Operate for sewage treatment plant from SPCBs 	ULB/EA/Contractor

S. No	Project Portfolio	Applicable Legislations	Obligations	Responsibility
			<ul style="list-style-type: none"> • Ensure Air and Noise quality is within the stipulated limits of SPCB and CPCB 	
B Industrial Pollution Control Investments				
1.	Common Effluent Treatment Plants	Hazardous Wastes (Management and Handling) Amendment Rules, 2000	<ul style="list-style-type: none"> • Secure the Consent to Establish and Consent to Operate from SPCBs • Obtain Environmental Clearance from MOEF • Ensure Air, water(surface and ground) and Noise Quality is within stipulated limits of SPCB's/CPCB 	ULB/ EA/ Contractor
2.	Hazardous Waste Receiving, Treatment, Storage and Disposal Facilities	Hazardous Wastes (Management and Handling) Amendment Rules, 2000	<ul style="list-style-type: none"> • Secure the Consent to Establish and Consent to Operate from SPCBs • Obtain Environmental Clearance from MOEF • Ensure Air, water(surface and ground) and Noise Quality is within stipulated limits of SPCB's/CPCB 	ULB/ EA/ Contractor
C Solid Waste Management Facilities				
A.	Engineered Landfill Sites	MSW Rules, 2000 Air, Act, Water Act and EPA	<ul style="list-style-type: none"> • Secure the Consent to Establish and Consent to Operate from SPCBs • Obtain Environmental Clearance from MOEF • Ensure Air, water(surface and ground) and Noise Quality is within stipulated limits of SPCB's/CPCB 	ULB/ EA/ Contractor
B.	Composting Facilities	MSW Rules, 2000 Air Act Water Act and EPA	<ul style="list-style-type: none"> • Secure the Consent to Establish and Consent to Operate from SPCBs • Obtain Environmental Clearance from MOEF • Ensure Air, water(surface and ground) and 	ULB/ EA/ Contractor

S. No	Project Portfolio	Applicable Legislations	Obligations	Responsibility
			Noise Quality is within stipulated limits of SPCB's/CPCB <ul style="list-style-type: none"> • Ensure no odour and fly nuisance in and around the waste segregation units within the compost yard through appropriate mitigation measures 	
D River Front Development Schemes				
A.	River front development and beautification schemes	None	<ul style="list-style-type: none"> • Ensure Air and Noise Quality is within stipulated limits of SPCB's • Ensure minimum hindrance to traffic, pedestrians and minimum interruption to services 	ULB/ EA/ Contractor
B.	Construction of Bathing Ghats	None	<ul style="list-style-type: none"> • Ensure Air and Noise Quality is within stipulated limits of SPCB's • Ensure minimum hindrance to traffic, pedestrians and minimum interruption to services 	ULB/ EA / Contractor
C.	Redevelopment of cremation grounds situated along river banks	None	<ul style="list-style-type: none"> • Ensure Air and Noise Quality is within stipulated limits of SPCB's • Ensure minimum hindrance to traffic, pedestrians and minimum interruption to services 	ULB/ EA/ Contractor
D.	Modification of electric /CNG crematoriums situated along river banks	Air Act, 1981	Secure No Objection Certificate from SPCB <ul style="list-style-type: none"> • Consent to establish • Consent to Operate • Ensure Water, Air and Noise quality is within the stipulated limits of SPCB. 	ULB/EA/ Contractor

Section 5 Implementation, Monitoring and Reporting Arrangements

5.1 General

90 In order to achieve the objective of ‘Mission Clean Ganga’ by 2020, NGRBA program provides financial assistance for implementation of river pollution abatement/mitigation investments in Ganga main stem states. In addition to complying with various technical and performance standards, the investments to be supported under this program shall comply with the Environmental and Social Management Framework. The implementation, monitoring and reporting arrangements for the ESMF have been worked out within the overall institutional structure for implementation of the NGRBA program, as described in the sections below.

5.2 NGRBA Institutional Arrangements

91 As nodal Ministry for the NGRBA program, the MoEF through PMG is the primary implementing agency for the project at the national level. The implementing agencies at the state level are the SPMGs. At the local level, specific Executing Agencies (EAs) will be selected for implementation of various activities, including infrastructure investments under the NGRBA program. EAs may include para-statal organizations, Special Purpose Vehicles and Joint Ventures (SPVs/JVs), Urban Local Bodies (ULBs), appropriate state-level departments, NGOs, or public institutions.

92 The main functions of the various agencies with regard to the NGRBA program include the following:

- The PMG will be responsible for overall project planning and management at the national level; direct implementation of the national level activities; ensuring satisfactory implementation of the state-level investments and activities; providing guidance, support and approvals to the SPMGs where needed; and monitoring implementation performance;

- The SPMGs will be responsible for project planning and management at state level, ensuring satisfactory implementation of the state-level investments and activities; direct implementation of some of the state-level activities; providing guidance, support and approvals to the state EAs where needed; and monitoring implementation performance of the EAs;
- The EAs will plan and implement the activities/investments and put in place arrangements for satisfactory and sustainable operation and maintenance of the assets created. The EAs will be responsible for all contract management, including preparation of feasibility reports and DPRs, and seeking the necessary approvals.

5.3 Implementation, Monitoring and Reporting Arrangements for the ESMF

93 Within the above overall implementation Guideline of the NGRBA program, environmental and social due diligence will be carried out by the relevant agencies at each stage of the project cycle in accordance with the guidance provided in the ESMF.

94 A Social Development Officer and an Environmental Officer will be appointed for managing social and environmental issues (including safeguards issues) at both central level as well as in each of the project states. These officers will assist the EAs in implementation of ESMF provisions.

95 In the EA, an officer each will be designated as social and environment officer who will be responsible for the implementation of ESMF tasks at the field level with the assistance and participation of the local self-government. These officers will also have the responsibility of implementing safeguard activities along with other project components, and for co-ordination among different agencies, such as the local self-government, Revenue Department etc. During implementation, meetings will be organized by the SPMGs inviting all EAs in the state for providing information on the progress of the project work.

- 96 An independent Environment and Social/Compliance Monitoring Audit will be conducted by third party inspection agency for each of the sub projects, A sample terms of reference for the audit is presented in **Annex IV**.

The project cycle for an investment under the NGRBA program and the interface with the ESMF requirements are summarized hereunder.

Project Screening

- 97 Upon receipt of request for funding, SPMG will assess the eligibility of the sub-project in line with the agreed framework. The scope of the project would be discussed and the guidelines for project preparation would be shared. The screening criteria and categorisation of sub-projects on that basis would also be explained. Once the FR is approved and the categorisation of the sub-project has been agreed upon, the EA would be advised on the appropriate DPR preparation toolkit that needs to be followed.
- 98 The EA will prepare a Detailed Project Report (DPR) including environment and social management plan (ESMP) tailored to the specific sub-project (for Low impact category investments). For High impact category investments, the EA will engage external agencies to undertake preparation of the ESMP (including RAP as relevant) in line with the requirements of ESMF. While initiating the ESMP (including RAP, as relevant), the EA/ external agency will be guided by the model Terms of Reference annexed and shall interact with the Environmental and Social Specialists in the SPMG to seek guidance in the finalization of scope of work and the development of the plans.
- 99 On receipt of the ESMP (including RAP, as relevant), specialists will evaluate the completeness of the documents and their compliance with the ESMF. Further actions, if any required, will have to be carried out by the EA prior to the appraisal of the project.

Project Appraisal

100 During project Appraisal, the SPMG will appraise the project preparation leading to the approval of the DPR. The aspects that will be appraised during the project appraisal will include the following aspects:

- Environmental and social suitability of site
- Adequacy of the ESMP (including RAP, as relevant) as per the ESMF including analysis of alternatives, if possible
- Compliance with regulatory requirements and clearances
- Comprehensiveness of the ESMP (including RAP, as relevant) in light of the project specific environmental and social issues
- Integration of environmental and social mitigation measures in to the design, wherever relevant/ required
- Arrangements for implementation of ESMP (including RAP, as relevant), including institutional capacity and contractual provisions
- Inclusion of ESMP (including RAP, as relevant) budgets in the project cost and contract documents
- ESMP (including RAP, as relevant) monitoring and reporting arrangements
- Need for any legal covenant to address specific environmental risks including regulatory risks, if any
- Risk analysis / allocation
- environment and social enhancements (if any / applicable)

101 The Environment and Social Management Plan (ESMP) prepared for the project will form part of the bidding documents, in addition to the references to various acts relating to environment and labor, and the implementation of the same will be monitored by SPMG and PMG.

Project Approval and Disbursement

102 After requisite approvals and concurrence are obtained, SPMG will discuss implementation of environmental and social management measures of the project with the EA to ensure that these are suitably incorporated into the respective legal /contractual documents, for implementation by the EA.

103 The civil works will be initiated only after the required land has been acquired and declared free from encroachments and other encumbrances and the EA has the physical possession of the land. Before the start of civil works the compensation has to be disbursed to the land owners. During implementation, consultations with the communities shall be undertaken by the EA / NGOs for providing information on the progress of the project work. The roles and responsibility of each of the Agency/Official involved are further detailed in **Annex III**.

Monitoring and Reporting Arrangements

104 The PMG, through the respective SPMGs will monitor all the approved investments under the NGRBA program to ensure conformity to the requirements of the ESMF. The monitoring will cover all stages of construction, operation and maintenance. The monitoring will be carried out through the environmental and social safeguard compliance reports that form a part of Quarterly Progress Reports for all investments and regular visits by the environmental and social specialists of the PMG and SPMGs. In addition to the above, the PMG will undertake an annual ESMF audit and will review the status of ESMF compliance, as per the sample terms of reference provided in Annexure IV.

105 The PMG will review these audit reports and identify technical, managerial, policy or regulatory issues with regards to the compliance of the ESA reports. The identified technical issues will be duly incorporated in the subsequent investments. Policy and regulatory issues will be debated internally by the PMG's internal review committee and the need for appropriate interventions will be determined. These interventions could include appropriate revision of ESMF document or suitable analytical studies to influence policy or programs of the state, if found necessary / warranted.

106 An external evaluation of the RAP implementation prepared under NGRBA program will also be undertaken twice during the implementation of the project – midterm and at the end of the implementation. The Table 5.1 below details out the mitigation measures for each impact type, monitoring measures, responsibility and timeline.

107 Tribal Management Framework (TMF) will be implemented by SPMGs with the help of EAs. In absence of in-house capacity of EAs, third party may be hired, either an NGO or a consulting firm.

108 During implementation, meetings will be organized by the SPMGs inviting all EAs in the state for providing information on the progress of the project work. The project cycle for an investment under the NGRBA program and the interface with the ESMF requirements are summarized **Table 5.1**.

TABLE 5.1 MITIGATION, MONITORING, RESPONSIBILITY AND TIMELINE

S. No	Impact	Monitoring Measures	Responsible Agency	Timeline
1	Land acquisition	Regular internal monitoring by the EA and SPMG and periodic evaluation	EA	12 months from the start date. Compensation to be paid before the start of civil works.
2	Acquisition of house/ structure	Regular internal monitoring by the EA , SPMG and periodic evaluation	EA	12 months from the start date of the activities of the priority investment. Assistance to be paid before the start of civil works.
3	Loss of livelihood or source of livelihood	Regular internal monitoring by EA; midterm and end term evaluation	EA	12 months from the start date of the activities of the priority investment. Assistance to be paid before the start of civil works.
4	Loss of access to private and / or common property	Regular internal monitoring by the EA; ; midterm and end term evaluation	EA, ESMF Auditors	12 months from the start date of the activities of the priority investment. Assistance to be paid before the start of civil works.
5	Displacement of Non Titleholders	Regular internal monitoring by the EA; a; midterm and end term evaluation	EA, ESMF Auditors	

6	Group support to Tribal community	Regular internal monitoring by the social development professional of EA along with NGO; midterm and end term evaluation	EA; District Administration; ESMF auditors	12 months from the start date of the activities of the priority investment, followed by annual audit
7	Gender Action Plan	Regular internal monitoring by the social development professional of EA along with NGO; midterm and end term evaluation	EA, ESMF Auditors	12 months from the start date of the activities of the priority investment, followed by annual audit

TABLE 5.2 ESMF IMPLEMENTATION AND MONITORING ARRANGEMENTS

Milestones	Objectives	Process	Responsibility	Decision/Target/ Deliverable
1. Sub- Project Screening (at the FR stage)	To approve categorisation of proposed sub-projects into high/ low impact investments	a. Discussions with EA to - assess eligibility of project based on NGRBA's priorities in consonance with Mission Clean Ganga - identify scope of project report b. EA to submit FR along with proposed impact categorisation c. SPMG may seek expert opinion	<ul style="list-style-type: none"> • PMG • SPMG • EA 	<ul style="list-style-type: none"> • Decision to proceed or not • Identification of impact category
2. Sub- Project Appraisal (at the DPR stage)	To ensure satisfactory compliance with ESMF	Detailed appraisal of the ESMP (including RAP, where relevant), including site visits/ investigations if necessary assess suitability of site, adequacy of ESMPs, risk analysis and regulatory clearances EA to submit ESMP as part of DPR for approval	<ul style="list-style-type: none"> • SPMG • PMG 	<ul style="list-style-type: none"> • Review report and decide to <ul style="list-style-type: none"> - accept - accept with modifications - reject and instruct to resubmit DPR
3. Approval	Approvals from SPMG/ PMG	a. SPMG to recommend to PMG b. PMG to recommend to Empowered Committee	<ul style="list-style-type: none"> • SPMG • PMG 	<ul style="list-style-type: none"> • Approval of DPR
4. ESMP Implementation Monitoring and Review	Ensure Implementation of agreed ESMP (including RAP, where applicable)	a. Prepare quarterly progress reports b. Schedule field visits as required c. Third party audit	SPMG, EA, Contractors	<ul style="list-style-type: none"> • Quarterly Progress Report

5.4 Social Accountability and Grievance Redressal Mechanism

109 Social Audit, a viable instrument of sustainable program delivery, is in fact People's Audit, which provides a succinct view of performance based on society's perceptions and analysis at large. Citizen's Monitoring Committee will perform Social Audit in a manner prescribed by the Government of India.

110 An integrated system will be established with Grievance Redressal Cells (GRCs), with necessary officers, officials and systems, at the local EAs, ULBs, SPMGs and the PMG levels. Grievances may be submitted through various mediums, including in person, in written form to a noted address, through a toll free phone line or through direct calls to concerned officials, and online. All local contact information and options for complaint submission will be available on site on local information boards. Moreover, they will be in addition to the PIO officers to be appointed under the RTI Act. Under GAAP, a half yearly report on Grievance Redressal by the PMG, SPMG and EA will be prepared. The project will abide by the RTI Act of 2005 and under provisions of Section 4 of the Act; it will commit itself for proactive disclosure and sharing of information with the key stakeholders, including the communities/beneficiaries. The project will have a communication strategy focusing on efficient and effective usage of print and electronic media, bill boards, posters, wall writing, and adoption of any other method suiting local context, logistics, human and financial resources.

As part of IGRM, a Grievance Redress Cell (GRC) will be set up at the district level wherever investments have been or will be planned. Since each project town / city will have Citizen's Monitoring Committee (CMC), the GRC will be a subcommittee of the citizen's monitoring committee. The staffing of GRC will include two representatives from CMC and the concerned executive engineer of EA. The head of the cell will be a person of repute but not continuing in the government service. The GRC will have its own bye laws. The functions of the GRC will include: (i) to redress grievances of project affected persons (PAPs) in all respects; (ii) rehabilitation and resettlement assistance and related activities; (iii) GRC will only deal/hear the issues related to R&R and individual grievances; (iv) GRC will give its decision/verdict within 15 days after hearing the aggrieved

PAPs; (v) final verdict of the GRC will be given by the Chairman/Head of GRC in consultation with other members of the GRC and will be binding to all other members.

5.5 Training and Capacity Building

- 111 Being a new entity, the PMG & SPMGs staff will need additional training in the management of environmental and social issues of the program. The training program for various relevant stakeholders will include an orientation program on the ESMF, Project Management, Engineering and Public Health. Course outline for various modules, the duration and the participation envisaged has been illustrated in **Table 5.3**
- 112 The training program is to be co-ordinated and anchored by PMG with the support from agencies / individuals experienced in safeguard aspects of urban infrastructure investments for developing courses on conducting training programs.
- 113 The training will focus on the environmental and social issues. The contents will basically focus on the ESMF, concept, regulatory requirements, Environment and Social priority issues, project cycle of NGRBA program investments, outline of EA / SA and report formats in respect of the Environmental aspects. In respect of social aspects the course content will focus on the R & R policies and procedures, Land Acquisition process, identification of PAPs, Social entitlement frameworks, social assessment, RP techniques, and Risk Assessment and management skills. The generic training program is elaborated in Table 5.3
- 114 In addition to the above, NGRBA program will make a conscious effort to mainstream the environmental and social issues within the training programs of PMG. The program will be structured in such a way that it clearly brings out the value addition and enhancement benefits of proper management of environmental and social issues.

115 As part of the capacity building exercise, PMG also aims at developing decentralized local capacity on managing environmental and social issues associated with various investments. In order to achieve the above objective, the specialists will develop a network of technical man power resources such as staff from universities / research institutions, civil society organisations, etc. These persons will be trained during the course of NGRBA program, so that they can provide support to the ULBs in implementing ESMP (including RAP, as relevant) recommendations and also offer support on an on-going basis.

Table 5.3: Generic Training Programme

Programs	Contents			Duration / Schedule	Participants
<p>Program 1 Orientation Program / Workshop for Project Development agency</p>	<p>Module 1 - ESMF Profile</p> <ul style="list-style-type: none"> • NGRBA Concept • ESMF Concept • Regulatory Requirements-E&S Priority Issues • Sub project types of NGRBA program • ESA and SESA Process Outline • Reports & Formats 	<p>Module 2 Environmental Assessment Process</p> <ul style="list-style-type: none"> • Environmental Laws & Regulations • EIA process • Identification of Environmental Impacts • Impact Identification Methods • Identification Mitigation Measures • Formulation of Environmental Management Plan • Implementation and Monitoring • Institutional Mechanism 	<p>Module 3 Social Assessment Process</p> <ul style="list-style-type: none"> • Social Assessment process • Description of NGRBA program R&R, tribal and gender frameworks and procedures and National requirements • LA process • Necessity for RAP and its preparation process 	<p>1½ day (1st, 3rd and 5th year of the project)</p>	<ul style="list-style-type: none"> • Environment and social staff of PMG and SPMG • Heads of Statutory Boards and other monitoring agencies
<p>Program - 2 Orientation Program / Workshop for Project Implementing agency</p>	<p>Module 1 - ESF Profile</p> <ul style="list-style-type: none"> • NGRBA Concept • ESMF Concept • Regulatory Requirements-E&S Priority Issues • Sub project types of NGRBA program • ESA and SESA Process Outline • Reports & Formats 	<p>Module 2 Environmental Assessment Process</p> <ul style="list-style-type: none"> • Environmental Laws & Regulations • EIA process • Identification of Environmental Impacts • Impact Identification Methods • Identification Mitigation Measures • Formulation of Environmental Management Plan • Implementation and Monitoring • Institutional Mechanism 	<p>Module 3 Social Assessment Process</p> <ul style="list-style-type: none"> • Social Assessment process • Description of NGRBA's R&R, tribal and gender frameworks and procedures and National requirements • LA process • Necessity for RAP and its preparation process 	<p>1½ day (1st, 3rd and 5th year of the project)</p>	<ul style="list-style-type: none"> • Municipal Commissioners of the ULBs and Heads of EAs • Engineering/Public Health personnel from the ULBs and social and environment staff of EAs • Engineering personnel from Statutory Boards, and environment and social staff of potential private operators / consultants.

Programs	Contents				Duration / Schedule	Participants
<p>Program -3 Workshop on Sectoral Environmental and Social Assessment</p>	<p>Module 1– Water supply, sewerage and sanitation</p> <ul style="list-style-type: none"> • ESMF Concept • Regulatory Requirements-E&S Priority Issues • Outline of ESA Process • Identification of Environmental and Social Impacts • Developing Mitigation Measures including entitlement frameworks • Formulation of Environmental and Social Management Plan including preparation of Resettlement Action Plan • Implementation and Monitoring arrangements • Budget preparation for implementation of ESMP • Case Studies 	<p>Module 2– Solid waste management</p> <ul style="list-style-type: none"> • ESMF Concept • Regulatory Requirements-E&S Priority Issues • Outline of ESA Process • Identification of Environmental and Social Impacts • Developing Mitigation Measures including entitlement frameworks • Formulation of Environmental and Social Management Plan including preparation of Resettlement Action Plan • Implementation and Monitoring arrangements • Budget preparation for implementation of ESMP • Case Studies 	<p>Module 3– River Front Development</p> <ul style="list-style-type: none"> • ESMF Concept • Regulatory Requirements-E&S Priority Issues • Outline of ESA Process • Identification of Environmental and Social Impacts • Developing Mitigation Measures including entitlement frameworks • Formulation of Environmental and Social Management Plan including preparation of Resettlement Action Plan • Implementation and Monitoring arrangements • Budget preparation for implementation of ESMP • Case Studies 	<p>Module 4 – Open Forum Feedback and comments from the Participants.</p>	<p>1½ days (every alternate years) (Introduction will be common to all and participants will be split according to their respective sectors)</p>	<ul style="list-style-type: none"> • Municipal Commissioners of the ULBs and heads of other EAs. • Engineering/ Public Health personnel from the ULBs and other EAs. • Engineering personnel from Statutory Boards, and potential private operators / consultants. • Environment and social staff of PMG; SPMGs; and EAs

Section 6 Public Consultations and Disclosure

6.1 General

- 115 The development of the ESMF is based on a consultative process that engaged key stakeholders at the national, state, and local levels and sought their feedback. Key government agencies have been consulted at the various levels to obtain their consent on the ESMF in general and specially on the land acquisition process and resettlement framework.
- 116 National level consultations on ESMF were held as follows:
- (i) April 17, 2010: A meeting on the international River clean-up experiences was held at Scope Complex, Lodi Road, New Delhi where MoEF, World Bank, States, ULBs, NGRBA expert members, and some NGOs participated. Consultations on broad outline of ESMF were conducted.
 - (ii) Sept.1, 2010: A meeting was organized in MoEF with States and PIAs – It was first consultant meeting on ESMF where MoEF made a presentation and draft of ESMF was shared with the States.
 - (iii) Oct. 25-26, 2010: A workshop for consultation on Investment frameworks and ESMF was organized in the World Bank where States, PIAs, PMG and World Bank participated and agreed on the broad contours of the ESMF. It was agreed that States would conduct the public consultations at important towns where projects are likely to be implemented under the program.
- 117 Following the national level consultations, public consultations have been carried out in sample sub project areas in each of the five participating states to get feedback and suggestions from the affected community on the ESMF. The dates of these consultation meetings were announced in the local newspapers in advance so that all interested parties could participate and provide suggestions. The ESMF was translated into local language and disclosed on the websites and placed with the offices of the nodal agencies prior to the consultation meetings. Representatives of the State Nodal Agencies facilitated the public consultation meetings. The consultants preparing the ESMF attended the public consultation

meetings in all the states to note the stakeholder suggestions and feedback. The minutes of the meeting was prepared highlighting the key discussions and issues raised by the stakeholders.

- 118 The schedule of the public consultations at the state level is provided in **Table 6.1**. The minutes of the meetings are given in the sections that follow.

TABLE 6.1 DETAILS OF THE PUBLIC CONSULTATIONS HELD AT THE FIVE SELECTED STATES

S.No	State	State Nodal Agency	Venue	Date	Time
1	Uttarakhand	Uttarakhand Peyjal Nigam	Nagar Pallika Bhawan, Haridwar, Uttarakhand	10th December 2010.	2:30 pm to 5:00 pm
2	West Bengal	Urban Development Department	Kolkata, West Bengal	21st December 2010	2:00 pm to 4:00 pm
3	Jharkhand	Urban Development Department, (Jharkhand)	Vikash Bhawan D.C. Office, Sahibganj, Jharkhand	23 rd December 2010	11:00 am to 2:00 pm
4	Uttar Pradesh	Ganga Pollution Control Unit, U.P Jal Nigam	Nagar Nigam, Guest House, Kanpur, Uttar Pradesh	28 th December, 2010	3:00 pm to 5:30 pm
5	Uttar Pradesh	Ganga Pollution Control Unit, U.P Jal Nigam	Sadan Hall, Nagar Nigam, Allahabad, Uttar Pradesh	29 th December 2010	3:00 pm to 5:00 pm
6	Bihar	Department of Urban Development	Patna, Bihar	4 th January 2011	3:00 pm to 5:00 pm

6.2 Minutes of Public Consultation Meetings

119 Public Consultation on Environment and Social Management Framework (NGRBA Program), held at Haridwar, Uttarakhand

Minutes

Date: 10th December 2010. **Time:** 2:30 PM to 5:00 PM

Venue: Nagar Pallika Bhawan, Haridwar, Uttarakhand

Attended by:

- State Nodal agency (Uttarakhand Peyjal Nigam): Mr. Prabhat Raj (Executive Engineer), Mr. S. C Gupta (General Manager), Mr. Y. K Mishra (Project Manager),
- Consultancy team from TERI: Mr. Sakaram Somayaji, Mr. C. G Hiremath, Ms. C. Sita Lakshmi
- Number of participants: 22 (representatives from NGOs, elected members of Nagar Pallika Haridwar and concerned individuals from Uttarkashi, Gangotri, Dehradun and Haridwar, list attached)

The public consultation meeting was flagged-off by Mr. Y. K Mishra who welcomed the participants and briefed them about the agenda of the meeting. Further the meeting was carried forward by Mr. Prabhat Raj, who presented the details about the Environment and Social Management Framework, starting from the current status of river Ganga, future government plans, possible assistance by World Bank, overall significance of ESMF, stake-holder participation during the project, etc. A brief summary of all the important points discussed during the meeting are mentioned in the following points:

- A target-oriented, continuous and regular mechanism to create education and awareness among the people, particularly the younger generation about the importance of keeping river Ganga clean.
- Provide proper sanitation facilities, along with efficient operation and maintenance systems, to the tourists and pilgrims (like the Kaavadis) who visit the state during religious occasions and other festivals.

- Active participation from the NGOs, the local communities and the *panchayats* needs to be ensured in the process of planning, implementation and monitoring of the project.
- All efforts should be made to safeguard and minimize any possible negative impact on the socio-cultural beliefs and traditions of the local communities regarding river Ganga, while implementing the sub-projects.
- Regular operation and maintenance mechanism for sustainable management of the facilities created during the sub-projects, along with sufficient budgetary provisions.
- In order to ensure proper cleaning of Ganga, all the tributaries in the state also needs to be covered under the project.
- A common concern among the stakeholders was the lack of any solid waste management plan, as of today, in the district. This project should incorporate suitable mechanisms for proper solid waste management in the river basin.
- To avoid time and cost run-over, the time gap between planning and implementation of the project needs to be minimised. This will also prevent the project to suffer due to price-escalations and consequent budget insufficiency.
- All safety and precautionary measures must be taken to avoid any accidents during the construction phase of the projects. Although the notice of the project along with other details and the specific agenda of the meeting was made available on the website of Peyjal Nigam, the ward members of Nagar Pallika, Haridwar suggested that hard copies of these details be provided to them individually, as internet is not easily accessible by everyone, so as to make their participation more effective.
- Ensure proper coordination between different government agencies/ departments with clear allotment of responsibilities and provide sufficient accountability at each level.

The meeting was concluded by Mr. Y. K. Mishra followed by vote of thanks given by Mr. S.C Gupta.

120 **Public Consultation Meeting on Environment and Social Management Framework (NGRBA Program) held at Kolkata**

Minutes

Date: Tuesday, 21 December 2010

Time: 2 p.m.

Venue: Unnayan Bhawan, Salt Lake, Kolkata

Attended by:

- Mr N Dey, Special Secretary, Urban Development Department, Government of West Bengal, Mr Chunar Dey, DGO, GAP
- Consultancy team from TERI: Dr Sujana Dhar, Ms Avanti Roy Basu
- No. of participants: 43 (including representatives from Barrackpore, Khardah, Panihati, Kamarhati, Gaeshpur, Konnagar, Serampore, Naihati, Halisahar, Mahestala, Behrampore, Jangipur, Nabadwip, Bhatpara municipalities, Kolkata Metropolitan Development Authority, Howrah Municipal Corporation, Chandannagar Municipal Corporation, West Bengal Pollution Control Board, Jadavpur University, ME Directorate and KMW&SA). Signed list of participants attached as Annexure IV.

The public consultation meeting was initiated by Mr N Dey who welcomed the participants and briefed them about the agenda of the meeting. The details of the Environment and Social Management Framework (ESMF), including the future activities planned by the government, possible assistance by World Bank, overall significance of the ESMF, stakeholder participation during the project, etc. were discussed. He also discussed the objectives of setting up the National Ganga River Basin Authority (NGRBA).

A brief summary of the important points discussed during the meeting are mentioned below.

- The various river pollution mitigation projects to be implemented under NGRBP, namely sewerage and sanitation schemes, sewage treatment plants (new/ up gradation), solid waste management, industrial pollution control initiatives and river front development schemes were highlighted. He stressed on the importance of the treated sewage water to only flow into the river.
- Mr Dey presented the genesis of the NGRBP and informed the participants that the mission is to clean River Ganga by 2020 and to bring the water quality to acceptable limits, which primarily flows through 5 states, namely, Uttar Pradesh, Uttarakhand, Bihar, Jharkhand and West Bengal.

- He described the structure of the NGRBA, chaired by the Hon'ble Prime Minister of India. The organizational structure of the NGRBP is as follows: At the national level, NGRBA is chaired by the Hon'ble Prime Minister of India, and the Empowering Steering Committee (ESC) has been formed. At the state level, SGRBA (State Ganga River Basin Authority) is chaired by the Hon'ble Chief Minister of the respective states. Also, State Project Planning and Monitoring Unit (SPMG) will be the state nodal agency and will be formed in West Bengal shortly. The SPMG will be a registered body and will be headed by the Principal Secretary of the State Urban Development Department. The State Executing Agency (SEA) will be formed at the state level. For execution of the project, EA (Executing Agency) – NGO or any state agency. City level monitoring agencies at the district level will also be formed.
- He discussed in length about the purpose of the ESMF (Environment and Social Management Framework) including matters related to land acquisition, entitlement issues, resettlement and rehabilitation of the Project Affected Persons (PAPs).
- The laws and regulations as well as World Bank Safeguard policies applicable to the project were discussed.
- The environmental categorization of the various sub-projects envisaged under the NGRBP was discussed.
- He mentioned that based on proper guidelines, feasibility reports (FR) will be prepared, and after obtaining necessary approvals from the state government and GoI, the DPR will be documented. The modifications will be made at the FR stage, and not at the DPR stage.
- Many activities related to RFD have already been implemented in many parts of the state. He stressed on the need of ladies' changing room (as part of the RFD sub-project) and the need of low-income scheme (as part of the sewerage and sanitation sub project).
- The O&M cost for the first five years will be included within the project cost, and will follow the 70:30 pattern (70% by GoI and 30% by state government). The funds will flow from GoI to SPMG to EA.

- The representatives of Panihati, Mahestala, Bhatpara, Gayeshpur and Chandan Nagar municipalities raised their queries, which were successfully handled by Mr Chunar Dey (GAP), Prof. A Majumdar (Jadavpur University) and Dr T K Gupta (WBPCB).
- Observations that the different agencies mostly failed to operate and maintain properly the sewage treatment plants e.g. Activated Sludge Process, Trickling Filters etc. constructed under GAP-Phase I and Phase-II were heard. The STPs like Waste Stabilization Ponds (WSP), however installed under GAP Phase I and Phase II operated and maintained satisfactorily. So, efforts must be exerted for installation of WSP for treatment of city sewage. Accordingly land selection (in rural areas) and acquisition should receive priority for interest of the work.
- Prof Mazumder stated that the current phase of GAP envisages installation of sewerage system in the town. The storm water during rain will flow along surface drains leading to Ganga. Thus house connections in the sewerage system need guarantee from the municipal authorities. If house connections are not done then sullage will continue to get discharged in the river. Thus house connection is a challenge for the future action plan.
- He also mentioned that recycling and reuse of treated waste water must receive serious attention in the projects. This will ensure use of treated wastewater in agriculture, pisciculture, ground water recharging etc. One has to conceive ecologically balanced wastewater treatment system for abatement of river pollution
- One of the objectives of GAP must be the positive impact on public health, Non-point pollution needs also to be addressed, and more thrust is needed to ensure peoples' participation in the programme.

Representatives of certain municipalities expressed their opinions and suggestions during the participatory discussion, and a few experts present in the meeting presented their views accordingly. A brief summary of the interactive session is given below:

- **Panihati Municipality** – Under the Ganga Action Plan, 13 nos of towns were covered in the 1st phase within KMA including Panihati. However,

the representative of Panihati Municipality complained that the sewage treatment plant (STP) constructed under GAP I is currently non-functional.

- **Mahestala Municipality** – There are several small-scale industrial units in Mahestala, which discharge untreated/partially treated wastewater directly into the river and pollute it. The representative of Maheshtala Municipality opined that due to financial reasons, it is not possible for these small units to set up wastewater treatment facilities at an individual level. Also, there is no sewerage network in Maheshtala. As a response to this, Dr T K Gupta, Chief Engineer, West Bengal Pollution Control Board (WBPCB) suggested that Common Effluent Treatment Plant (CETP) will be constructed for which land has to be identified. The formalities of land possession (for the CETP) may be discussed in the Committee meeting at a later stage during the project. The smaller industries need to be shifted to the common location so that their wastewater is managed in an efficient manner (through the CETP).
- **Bhatpara Municipality** – There are 18-19 large-scale industries in Bhatpara. The sewerage system in Bhatpara is decades old, with problems like sewerage congestion due to weak O&M practices. Even after making repeated requests to the WBPCB, no actions were taken from their end. Therefore, the problems related to management of industrial wastewater as well as sewage do exist in a big way. Dr T K Gupta assured that he will take necessary actions to address their grievances.
- **Gayeshpur Municipality** – The problems discussed by the representative of Gayeshpur municipality are similar to that of Bhatpara. He added that there is land available in Gayeshpur for any construction that might be required.
- **Chandan Nagar Municipality** – Untreated sewage from various point and non-point sources fall into the river. The representative from Chandan Nagar Municipality was of the opinion that municipal engineers should be involved in the decision making process

The meeting ended with the vote of thanks given by Mr Dey. He was grateful for the overwhelming response of the participants for the meeting, and requested their whole-hearted participation throughout the project.

121 **Public Consultation on Environment and social management Framework (NGRBA Program), held at Sahibganj, Jharkhand**

Minutes

Date: 23/12/2010

Time: 11:00 am to 2:00 pm

Venue: Vikash Bhawan, D.C. Office, Sahibganj, Jharkhand

Attended by:

- State nodal agency:
 - Mr. K. Ravi Kumar (District commissioner, Sahibganj)
 - Mr. Sangram Besra (Deputy Secretary, Urban Development Department)
 - Mr. Gajanand Ram (Associate town planner, Urban Development Department, Jharkhand)
 - Mr. Sisir Kumar Soren (Executive officer, Sahibganj)
 - Mr. Suresh Kumar (Executive officer, panchyat, Rajmahal)
- Consultancy team from TERI: Mr. Sunil Kumar, Ms. G. Mini
- Number of Participants: 75 Representatives from NGOs, elected members of Nagar palika Sahibganj and concerned individuals from Sahibganj and Rajmahal. Signed list of participants attached as Annexure IV.

The public consultation meeting was flagged-off by Mr. K. Ravi Kumar (District Commissioner, Sahibganj) and Mr. Gajanand Ram (Associate town planner, Urban Development Department, Jharkhand) who welcomed the participants and briefed them about the agenda of the meeting.

Further the meeting was carried forward by Mr. Gajanand Ram, who presented the details about the Environment and Social Management Framework (ESMF), starting from the current status of river Ganga, future government plans, possible assistance by World Bank, stakeholder participation during the project and the overall significance of ESMF. Various agencies involved in implementing the current programme were also explained in detail to the gathering. The guidelines

were translated to vernacular and made available to public and also all the documents related to NGRBA program has been uploaded in the MoEF/PMG website.

Mr. K Ravi Kumar and Mr. Gajanand Ram also briefed the gathering about the earlier efforts (GAP I and GAP II) to clean Ganga. The main reasons for the programme to be not so successful were cited as lack of proper operation and maintenance of assets created and comprehensive planning.

The Projects Planned under NGRBA program in Sahibganj and Rajmahal are:

- Sewage treatment system
- Solid waste management
- Improved crematorium
- River front beautification

A no. of sub-Projects would be considered under the above mentioned categories. Another important component considered under NGRBA program would be to create public awareness to check activities, which contribute to pollution in the river.

A brief summary of all the important points discussed during the meeting are mentioned below:

- It was informed that in Rajmahal & Sahibganj majority of the population lived in slum areas and they also need to be considered and sensitized while planning any projects/schemes. At the moment the fringe population are availing all the infrastructural benefits without being accountable to any kind of maintenance. Earlier there were only 18 wards in 2001 census and currently there are around 28 wards.
- It was emphasized that the projects have to be location specific and the paying capacity of the community has to be considered while planning the projects.
- Small industrialists were conspicuous by their absence in public consultation meeting, hence it was opined that they should also be

included in any further meetings especially the brick manufacturing industries which are normally situated at the bank of the rivers.

- The public wanted to know whether the levy of public contribution/tax for operation and management of the existing projects and upcoming projects under the scheme would be same for the local public and the industrialist. It was clarified that reference of taxation system would be as per State Govt. decision.
- It was expressed that in the upcoming sewerage project there should not be any mixing of drinking water pipelines with sewerage pipelines. Also solid waste should not be diverted towards sewer drainage. In response to the questions raised, the DC clarified the technical details of the drainage system and assured that mixing of drainage and drinking water cannot happen.
- A common concern among stakeholders was the indifference towards the rules and regulations when it comes to usage and maintenance of the infrastructure facilities provided. For instance, in spite of some existing drainage network people still continue to dispose their waste into the river, open defecation is common, littering of riverbanks is widespread. So how will the agency ensure discipline when the new projects come up? in response to the questions and concerns raised the D.C. conveyed that part of the problem is due to lack of manpower in Urban Local Bodies. New recruitments will take place and effective measures will be put in place to abide by the rules and regulations.
- It was suggested that projects should not be like a showcase it should be fruitful to the entire beneficiary.
- It was suggested that anti erosion projects/ works, which is currently under CWC, should be included in the Ganga main stem project.
- Since Sahibganj is a underdeveloped district levy of tax should be lesser as compared to other major towns and cities. Another justification given for less levy of tax is that Sahibganj being a non-industrial area/zone becomes the least polluter of the river. Hence, “polluter pay “concept has to be considered and higher taxes have to be levied from high polluting towns and cities.

- Currently dead animals are disposed in river Ganga as there are no burial places for animals. Nagar Palika also does not have any disposal place for dead animals.
- Another suggestion was to ensure proper coordination between different government agencies/ departments especially the Drinking Water and Sanitation Department and the urban body while implementing the project.
- The community was keen to know both tangible and intangible benefits of the project, which was explained to them in detail by the District collector and the Associate town planner.
- People did not voice any concern regarding R&R issue. They mentioned that they are largely satisfied by the existing compensation scheme.
- A common concern voiced by the stakeholders was regarding the difficulty of land acquisition in *khashmahal* estate of government. Nearly 1000 acres of land in Sahibganj comes under *khashmahal* estate. There is a high possibility that certain portion of the *khashmahal* land would come under project (mainly for – laying pipelines, sewerage junctions, pump house, sewage treatment plant etc.) and giving compensation for such land will create problems as these lands are claimed both by the government and the community.
- Peoples were also largely concerned about the decreased river flow of Ganga, and expressed their doubts about the existence of the river in another 10 to 12 years. Most of the queries related to planning and implementation of the project raised were satisfactorily answered by the D.C. and Associate Town planner.

The meeting was concluded by Mr. Gajanand Ram followed by vote of thanks, especially to Mr. K.Ravi Kumar (District commissioner) for their presence and valuable suggestions.

122 **Public Consultation on Environment and Social Management Framework (NGRBA Program), held at Kanpur, Uttar Pradesh**

Minutes

Date: 28th December 2010. **Time:** 3:00 PM to 5:30 PM

Venue: Nagar Nigam, Guest House, Kanpur, Uttar Pradesh

Attended by:

- State Nodal agency (Ganga Pollution Control Unit, U.P Jal Nigam): Mr. C M. Chaudhary (General Manager), Mr. Mukesh Kumar (Project Manager)
- Consultancy team from TERI: Ms. Sonia Grover, Ms. Swati Dabral, Mr. C. G Hiremath
- Number of participants: 38 (Mayor, Commissioner, Additional Municipal Commissioner, elected members of Kanpur Municipal Corporation, representatives from NGOs and Schools, concerned government officials, list attached as Annexure IV).

The public consultation meeting was initiated by Mr. C M. Chaudhary who welcomed the participants and briefed them about the agenda of the meeting. Further Mr. Mukesh Kumar presented the scope and objectives of the Environment and Social Management Framework (ESMF). Details about the ongoing and proposed projects under NGRBA program for Kanpur city was also presented during the meeting. A summary of the important points discussed during the meeting are mentioned below:

- Disposal of unburnt or half burnt dead bodies into the river Ganga should be prohibited and promotion of social institutions to perform last religious rites of unidentified and unclaimed dead bodies.
- More crematoriums should be built and existing ones should be renovated to cater to the need of growing population.
- Stakeholders' involvement at both project planning and implementation phase of the projects.
- Provision of proper sanitation facilities during religious occasions and other festivals.
- Inclusion of social development projects in the projects portfolio proposed by NGRBA program.
- Promotion of awareness generation at community and school levels especially in the fields of better solid waste disposal (idols, calendar, flowers, polythenes), promote usage of crematoriums, etc.
- Involvement of local communities (Pandits) for maintaining the river *ghats* to curb pollution. Initiative to start same rituals with the bodies specified

for burning in electric crematorium as is done with normal bodies to enhance acceptance of e-crematoria.

- Administrative and financial support for regular operation and maintenance of the projects.
- Establishment of institutional facilities for monitoring and maintaining the minimum flow (at least 50% of the volume generated) in the river, which is currently being interrupted by infrastructural activities (dams, barrages, diversions) on the upstream side of river Ganga.
- Facilitate reuse of treated wastewater for agricultural practices, parks, fire fighting, etc.
- Provision of segregated wastewater treatment from industry and domestic sectors.
- Provision of buffer zones (no-man zone)/integrated river front development for protection of river *ghat* against pollution (solid and liquid waste disposal, infrastructural development). Facilitate usage of this buffer zone for afforestation or flower plantation)
- Creation of Ganga Heritage Zone to focus development and protection against pollution.
- Adopt bioremediation techniques for treating wastewater until the new STPs become functional.
- Facilitate proper solid waste management along with the provision of utilisation of compost in agricultural/gardening activities.
- Prohibition of reverse boring of wastewater by the industries which are likely to pollute groundwater.
- Proper coordination between different government agencies during appraisal of the proposals and environmental impact assessment of the projects which may cause time delay for execution.

The meeting was concluded followed by vote of thanks given by Mr. C M. Chaudhary.

123 **Public Consultation on Environment and Social Management Framework (NGRBA Program), held at Allahabad, Uttar Pradesh**

Minutes

Date: 29th December 2010.

Time: 3:00 PM to 5:00 PM

Venue: Sadan Hall, Nagar Nigam, Allahabad, Uttar Pradesh

Attended by:

- State Nodal agency (Ganga Pollution Control Unit, U.P Jal Nigam): Mr. A K Mittal (General Manager)
- Consultancy team from TERI: Ms. Sonia Grover, Ms. Swati Dabral, Mr. C. G Hiremath
- Number of participants: 22 (Mayor, elected members of Nagar Palika Allahabad, representatives from press and concerned government officials, Signed list of participants attached as Annexure IV.

The public consultation meeting was flagged-off by Mr. A K Mittal who welcomed the participants and briefed them about the agenda of the meeting along with details of upcoming and proposed projects under NGRBA program. Further the meeting was carried forward by TERI's representatives, who presented the scope and objectives of the Environment and Social Management Framework and requested participants to share their concerns/suggestions with respect to the framework. A brief summary of the important points discussed during the meeting are mentioned below:

- A continuous and regular mechanism of creating awareness among community and school children's through street plays, public and religious gatherings (Mela), displaying banners, etc.
- Provision of proper sanitation facilities along with efficient operation and maintenance systems during religious occasions and other festivals.
- Community involvement needs to be ensured during the project initiation and implementation stage of the project.
- The implementation activities of the projects must be completed in time to avoid the problems of traffic diversions, public congestions, and commercial displacement especially during *Maha Kumbh Mela*.
- Promote reuse of treated wastewater for irrigation and gardening purposes.

- Mechanism for proper solid waste management along the banks of both river Ganga and Yamuna.
- Provision of wastewater treatment facility at Dhobi *Ghat* for caustic soda based effluents.
- Imposing strict regulation on upcoming new colonies to establish their own STPs.
- Ensure proper site selection for pumping stations along with efficient operation and maintenance of pumping stations in order to avoid back flow or clogging of sewers.
- Request to start sewer and drainage projects simultaneously and completed in time to avoid mixing of wastewater with drainage water.
- Ensure technically feasible solutions while designing the alignment of sewer lines and dimensions of the sewer to cater the needs of growing population.
- Request to maintain minimum size of the sewer more than 150 mm to avoid clogging of sewers.
- Ensure sufficient distance/ depth while aligning the sewer lines adjacent to the water supply lines to avoid contamination of drinking water.

The meeting was concluded followed by vote of thanks by Mr. A K Mittal

124 **Public Consultation on the Environmental and Social Management Framework (ESMF) for the National Ganga River Basin Authority (NGRBA Program) held at Patna, Bihar**

Minutes

Date: 04/01/2011

Time: 03:00 pm to 5:00 pm

Venue: Conference hall, urban development office, Vikas Bhawan, Patna, Bihar.

Attended by:

- State nodal agency:
 - Dr. D.K. Shukla (Special Secretary, Urban Development and Housing Department, Government of Bihar)

- Mr. A.K. Sharma (CGM, Bihar Urban Infrastructure Development Corporation Ltd. Bihar)
 - Mr. P.U. Asnani (Team leader, UTAST-SPUR, Bihar)
 - Mr. Satish Chand Agrawal (Senior Environment and Public Health Engineer, SPUR-UTAST, Bihar)
 - Mr. Sanjay Shakya (Infrastructure and Procurement specialist, SPUR-UTAST, Bihar)
 - Mr. Chand Rehmani (BUDA, Urban Development and Housing Deptt.)
- Consultancy team from TERI: Mr. Sunil Kumar, Mr. Avneesh Nayal
 - Number of Participants: 26 Representatives from NGOs, elected members of Nagar Palika and concerned individuals from Patna and other districts of Bihar. Signed list of participants attached as Annexure IV.

The public consultation meeting was flagged-off by Mr. Satish Chand Agrawal (Senior Environment and public health engineer, SPUR-UTAST, Bihar), and Mr. P.U. Asnani (Team leader, UTAST-SPUR, Bihar) who welcomed the participants and briefed them about the agenda of the meeting.

Further, the meeting was carried forward by Mr. P.U. Asnani, who presented the details about the Environmental and Social Management Framework (ESMF), starting from the current status of river Ganga, future government plans, possible assistance by the World Bank, stakeholder participation during the project and the overall significance of the ESMF. Various agencies involved in implementing the current programme were also explained in detail to the gathering.

The guidelines were translated to vernacular and made available to public and also all the documents related to NGRBA program have been uploaded onto the MoEF/PMG, department website.

Mr. P.U. Asnani and Mr. Satish Chand Agrawal also briefed the gathering about the upcoming projects and list of towns selected under the NGRBA program. Total 21 towns have been selected from 9 districts of the Bihar state.

The upcoming Projects Planned under NGRBA program in Bihar are:

- Sewage treatment plants including Dhobi Ghat and Community toilet
- Integrated Solid waste management
- Improvement of crematorium
- River front development

A number of sub-projects would be considered under the above-mentioned categories. Another important component considered under NGRBA program would be to create public awareness to check river-polluting activities

A brief summary of all the important points discussed during the meeting are mentioned below:

Social and Organizational concerns/suggestions:

- Awareness about the program projects and sub-projects must be generated to a large extent in order to ensure implementation and effectiveness.
- For all projects, elected representatives of the state must lead the way and communicate efficiently with the public.
- Documents and messages delivered to the public must be made in simple language and easily comprehensible. This will ensure that they are made aware, will respond positively to their duties and will contribute to the implementation of projects.
- It is absolutely essential for good communication and transparency between the elected representatives (ward councillors, mayor) and government officials to ensure efficient execution of the projects.
- A higher level of cooperation and contribution from the State Pollution Control Board will be required.
- ‘Livelihood links’ that exist with the Ganga River and the related projects should be highlighted. For this, a task force or Ganga Panchayat should be constituted. These task force units would partake in Capacity Building of locals and training of Urban Local Bodies.
- Before implementation of projects, the location of projects must be consulted with the local people of the project-affected area.
- Local Institutional support could be taken for project planning and development.

- Encroachment of lands and construction of residential complex should not take place in the River Catchment areas.

Environmental and Technical concerns/suggestions:

- Solid Waste Management related projects must implement a door-to-door collection system in order to reduce the number of waste collection points. All efforts to be made to make the town a bin free city.
- Effluent discharge limits for slaughterhouses along the riverbanks should also be established. In addition, these slaughterhouses must be made modern and more environment-friendly. The State Pollution Control Board should strictly implement the Environment Protection Act particularly for slaughter houses discharging their waste in to river Ganga without treatment.
- Various check dams could be built on the tributaries of the river Ganga in order to achieve better flood and disaster management. In this way, formation of islands in the course of Ganga can also be stopped. In addition, small hydropower plants could also be setup.
- There are various ‘Arsenic-zones’ adjacent to the riverbanks that must be addressed.
- A master plan is to be developed for the entire Ganga River Basin using Remote Sensing and GIS under the NGRBA program.
- Integrated River Basin projects should also be developed under NGRBA program.
- The demarcation of ‘Heritage Zones’ must be done about 1-2 km adjacent to the riverbank area. These zones will be protected and could serve as recreational and scenic areas.
- Technical trainings should be provided to concerned officials and elected members for better implementation of the projects.

The SPUR-UTAST on behalf of Urban Development Department has submitted comments on ESMF (copy attached).

Finally the meeting was concluded by Mr. P.U. Asnani followed by vote of thanks.

125 The public consultation and disclosure process will continue during project implementation. The draft EIA/ EMP/ RAP etc. for the specific sub-projects will be discussed with the affected communities and the final documents will be placed on the websites of the PMG and the SPMGs. The copies of the EMP and RAP will also be placed at the offices of the executing agencies, district magistrate and contractor's office. The executive summary of the EIA and RAP will also be translated into local language and placed in the office of the *Gram Panchayat* of the affected villages.

End Notes

The following definitions are used in the documents:

Cut-off date: In the cases of land acquisition affecting legal titleholders, the cut-off date would be the date of issuing the notice u/s 4(1) of the LA Act, 1894. In cases where people lack title, the cut-off-date shall be the date of start of the Census survey undertaken by the project authority.

Project Affected Person: Affected persons are those who stand to lose all or part of their physical and non-physical assets including homes, productive land, community resources, commercial properties; livelihood; and socio-cultural network.

Project Displaced person: A displaced person is a person who is compelled to change his/her place of residence and/or work place or place of business, due to the project.

Affected family means: A family whose primary place of residence or other property or source of livelihood is adversely affected by the acquisition of land for a project or involuntary displacement for any other reason

Definition of Family: “Family” shall mean husband, wife and dependants including parents and children in case of joint family on the date of section 4 of LA Act or entry in the family register of Panchayat. Major sons and daughters will be treated as separate family if their livelihood is separately affected by the project.

Wage Earner: A person who is working with a commercial establishment or working as a labour in an agriculture land, which is being affected by the project.

Non-Title Holder: A person, who has trespassed Government land, adjacent to his/her own land or asset, to which he/she is not entitled, and deriving his/her livelihood prior to the cut-off date.

or a person who is land less and has settled on publicly owned land without permission and has been occupying publicly owned building without authority prior to the cut-off date.

Below Poverty Line (BPL): A family whose annual income from all sources is less than a designated sum as fixed by the concerned State Government in which the project falls, will be considered to be below Poverty Line.

Vulnerable Person: Unless otherwise specifically mentioned in this document, a person who has been designated under 'Below Poverty Line' category as identified by the concerned State Government will be considered a vulnerable person. Disadvantaged persons belonging to SC, ST, disabled/handicapped, and woman heading the household are also recognized as vulnerable persons. Also vulnerable persons such as the disabled, destitute, orphans, widows, unmarried girls, abandoned women ,or persons above fifty years of age; who are not provided or cannot immediately be provided with alternative livelihood , and who are not otherwise covered as part of family;

Entitled Person: person adversely impacted by the project and is entitled to some kind of assistance as per the project entitlement framework

Titleholders (THs): Persons who possess legal documents in support of claims made towards ownership of structure or land are titleholder.

Sharecroppers: Persons who cultivate land of a titleholder on certain conditions

ANNEXURES

Annexure I

Guidance on EIA of High impact category Sub-Project

(To be finalised by SPMG with inputs from PMG/ MoEF as applicable)

Introduction

High impact category investments require a full EA to be done by environmental consultants, separate from any evaluation performed by the design consultants. The environmental consultants have to closely interact with the design consultants in order to obtain the necessary data, information, reports and support as required. The EA process has to be carried out, and the EA & EMP reports have to be prepared. This guidance includes a typical terms of reference and also suggests the structure and content of the EA & EMP report. The terms of reference are general in content. As it is likely that there are some specific environmental issues that require to be addressed and these are known in advance, these need to be informed to the environmental consultants.

Terms of reference

The following terms of reference should be used:

Description of Project

- To provide a full description of the project, with details on specific sites, populations impacted, project design, implementation schedule, number / types of connected industries, details of any pre-implementation activities (i.e. public education and/or involvement, pilot studies, etc.), operation and maintenance

activities, required off-site investments, project life span, etc. Project description should also include any and all required information as stipulated below.

Policy and legal Guideline

- To collect information on the prevailing national, state and local laws, pertinent to environmental quality, health and safety, waste management guidelines, air and water quality regulations, protection of sensitive areas, land uses control and others. Manner of complying with relevant laws, such as the appropriate avenue for submission of required materials, should be described in detail.
- To convey to the contractor / relevant implementing actor the manner in which the enforcing body will conduct its monitoring / enforcement activities, as well as information as to what government assistance (e.g. technical assistance) government bodies can provide to the actor so as to facilitate the actor's compliance.
- To determine its applicability of all laws to the proposed sub-project and to include the specific clearances/ approvals that has to be obtained by the SGRBA/ contractor/ relevant implementing actor.
- To assist the SPMG/ contractor/ relevant implementing actor in any clearances/ approvals that may be required to implement the sub-project in terms of completing forms/ applications, and defending the sub-project before Government committees.

Baseline Study of Proposed Project Area

- To assemble, evaluate and present baseline data on the relevant environmental characteristics of the sub-project area, including changes anticipated before the commencement of the project. The description of the baseline environmental setting shall be worked out from the secondary data sources supplemented by the primary data collected as part of the various surveys carried out as part of the EA preparation.
- To describe the physical environment: geology; topography; soils; climate and meteorology; ambient air quality; noise quality; surface and ground- water hydrology; existing sources of air emissions; existing water pollution discharges; and receiving water quality, etc. Description should include both a general

overview of overall study area, as well as more detailed information for specific implementation sites.

- To describe the biological environment: flora; fauna; rare or endangered species; sensitive habitats, including reserved forests, wildlife reserves and sanctuaries etc. Description should include both a general overview of overall study area, as well as more detailed information for specific implementation sites.
- To describe the socio-cultural environment: population; land use; planned development activities; community structure; employment; distribution of income, goods and services; recreation; public health; cultural properties; and tribal people and their usufruct rights, common property resources, etc. Description should include both a general overview of overall study area, as well as more detailed information for specific implementation sites.

Public consultation

- To carry out public consultation and participation as an integral part of the EA. Consultation sessions shall be carried out with different stakeholder groups at the local, regional and district levels, so as to incorporate the various environmental concerns and needs of the community and the relevant stakeholders. Specific attention should be paid to Project Affected Persons (PAPs), namely, those whose habitations or livelihoods will be directly impacted by the proposed sub-project.
- To ensure the effectiveness of the consultations and the full participation of all stakeholders in the project, all relevant information shall be shared with the likely PAPs and local NGOs in a timely manner prior to the consultation and in a form and language that are understandable and accessible to the groups being consulted.
- To ensure that consultations with these groups are carried out at least at the following two occasions: (a) shortly after environmental screening and before the terms of reference for the EA are finalized; and (b) once a draft EA report is prepared. Such groups should also be consulted throughout project implementation as necessary to address EA-related issues relevant to them, allowing relevant stakeholders the opportunity to share their concerns during both the design and implementation phases of the project.
- To make available both the initial draft EA and the report's conclusions at all relevant public locations accessible to PAPs and relevant stake holders. The EA report shall also be disclosed in website of the SPMG and PMG.

Impact analysis

- To identify, analyse and evaluate the different kind of impacts, and to distinguish between significant positive and negative impacts, direct and indirect impacts, and immediate and long-term impacts.
- To determine the impacts on sensitive receptors identified during the baseline environmental analysis.
- To determine the impacts on sensitive areas: critical natural habitats (such as conservation areas, sanctuaries, sacred groves, etc.) and migration routes; “induced development”; historic, cultural and religious buildings and sites; archaeological sites and tourism areas, etc.

Analysis of alternatives

- To describe alternatives that were examined in the course of developing the proposed project and identify other alternatives, which would achieve the same objectives. The concept of alternatives extends to siting, design, technology selection, construction techniques and phasing, and operating and maintenance procedures.
- To compare alternatives in terms of potential environmental impacts and suitability under local conditions. A “no project,” or Business as Usual, scenario should also be considered, wherein the environmental impacts of taking no action will be estimated.

Mitigation

- To identify feasible and cost-effective mitigation measures that may reduce potentially significant adverse environmental impacts to acceptable levels, capital and recurrent costs of the measures. These measures should be identified prior to construction of any investments or investments.
- To specify in a table the description of the measure along with who is responsible and when it has to be implemented.
- To include relevant drawings and technical specifications that would be required to implement the mitigation measure effectively during the design phase of any project or sub-project.

Monitoring

- To prepare detailed arrangements in a plan for monitoring implementation of mitigating measures and the impacts of the sub-project during construction and operation.
- To include in the initial plan an estimate of capital and operating costs, and a description of other inputs (such as training and institutional strengthening) needed to carry it out. These estimates should occur during the initial design/planning phase of the sub-project.
- To document in the initial plan what will be monitored, who would do it, who would receive its outputs, how much it would cost, how it would be financed and what other inputs (e.g. training) are necessary.
- To include in the initial plan a list of environmental monitoring parameters, and detailed specifications (methods, schedule, etc) for performance/compliance monitoring during construction, and operation stage of the sub-project.

Management

- To identify institutional needs to implement the recommendations of the EA. This would include manpower requirements, skill requirements and training, organisational mechanisms and information dissemination requirements.
- To recommend any further studies of environmental issues which should be undertaken during project implementation.

Others

- To document the important contributors to the EA and to record interagency/forum/consultation meetings; including list of both invitees and attendees.

Suggested structure and content of an EIA report

The EIA report should have the following structure and content:

- Executive Summary- project details, policy Guideline, baseline conditions, significant environmental impacts, salient points of the analysis of alternatives, salient mitigation and monitoring measures, and budget.
- Project Description - Concise description of the proposed project and its geographic, ecological, social and temporal context.

- Policy, Legal and Administrative Guideline - Government policies, environmental legislations and regulations currently under force.
- Baseline Data - Assessment of the physical, biological and socioeconomic conditions of the project locations.
- Environmental impacts - Prediction and assessment of the project's likely positive and negative impacts, in quantitative terms to the extent possible. The more significant environmental impacts and those that are considered critical by the public are to be further focused in this chapter.
- Analysis of Alternatives - Comparison of feasible alternatives to the project site / right-of-way, technology, design and operation – including the ‘without project’ situation – in terms of their potential environmental impacts
- Mitigation and monitoring measures - Enlisting and description of environmental impacts and the remedial measures to be taken. Preferably, this contains a comprehensive table containing a brief description of the impact, the type of remedial measure (prevention or mitigation or enhancement), the description of the measures, phase wherein applicable - pre-construction, construction and operational phases, and implementation responsibility.
- Budgets

Structure and content of an EMP

The EMP report should have the following structure and content:

- Introduction - Objective, scope, proponent's background, brief description of the sub-project and the purpose of the EMP
- Remedial Measures - Description and enlisting of the environmental impacts and remedial measures to be taken. Preferably, this contains a comprehensive table containing a brief description of the impact, the type of remedial measure (prevention or mitigation or enhancement), the description of the measures, phase wherein applicable - pre-construction, construction and operational phases, and implementation responsibility.
- Organizational arrangements for implementation - Institutional Guideline being established to ensure the implementation of the EMP.

- Environmental performance indicators are to be chosen and the basis for their selection. A linkage between these indicators and the important environmental impacts and the associated remedial measures needs also to be established.
- Monitoring mechanisms to be adopted that include reporting progress, frequency of monitoring, enhanced monitoring during specific seasons such as monsoons, etc.
- Mechanisms to ensure an ongoing dialogue with the public during the construction and operational phases.

The budget for the EMP implementation should be included in the overall sub-project. This should cover costs – mitigation, monitoring, training and public / stakeholder consultation and participation - due to be incurred during the construction and operational phases.

Annexure II

Generic Environmental Guidelines / Management Plan for Low impact category Investments

(To be finalised by SPMG with inputs from PMG/ MoEF as applicable)

Activity	Potential Negative Impact/Concern	Mitigation Measures	Responsible Agency for Mitigation	Monitoring Agency
I. Sewerage and Sanitation Investments				
A. Design and Development Phase				
Land Acquisition **	Loss of tree cover	<ul style="list-style-type: none"> Undertake afforestation in nearby areas 	ULB/ Project Implementing Agency	SPMG/ PMG
Treated Water Disposal into nearby stream ***	<ul style="list-style-type: none"> Pollution of stream water and other water bodies receiving STP discharges due to reduction in efficiency or non working of STP 	<ul style="list-style-type: none"> Ensure efficient working condition. – Choice of treatment process, construction technique, equipment and skilled operation and supervision critical to maintain effluent quality compliance. The treated water quality shall comply with the standards laid down by the state pollution control board for disposal onto the land, water body or for irrigation use. 	ULB/ Project Implementing Agency	SPMG/ PMG
Sludge Disposal***	<ul style="list-style-type: none"> Disposal of sludge leading to contamination of land and water. 	<ul style="list-style-type: none"> Providing adequate and safe sludge disposal facilities 	Design Consultant, ULB/ Project Implementing Agency	SPMG/ PMG
Provision for Accidental leakages/ bursts **	<ul style="list-style-type: none"> Flooding of the nearby areas with untreated sewage in event of accidental leakages or bursts 	<ul style="list-style-type: none"> The Design Consultants should design for bypass arrangements, to discharge untreated sewage. 	Design Consultants and EA	SPMG/ ULB
	<ul style="list-style-type: none"> Low lying areas in the site, which can get flooded during monsoons 	<ul style="list-style-type: none"> Provide proper drainage arrangements so that the water does not stagnate on the site 	Design Consultants and EA	SPMG/ ULB
Location of STP*	<ul style="list-style-type: none"> Nuisance hazards to neighbouring areas. 	<ul style="list-style-type: none"> Careful planning and design of STP with adequate buffer zones. Future growth of the surrounding areas shall be 	Design Consultants and EA	SPMG/ ULB

Activity	Potential Negative Impact/Concern	Mitigation Measures	Responsible Agency for Mitigation	Monitoring Agency
		considered.		
Developing sewage pumping station*	<ul style="list-style-type: none"> Noise and odour nuisance to surrounding areas. 	<ul style="list-style-type: none"> Select appropriate location away from sensitive locations such as schools and hospitals. Provide sufficient buffer areas Follow standard codes for selection pumps and other apparatus. Use less noise making and easy to operate equipment. 	Design Consultants and EA	SPMG/ ULB
B. Construction Phase				
Excavation, cutting and filling operations***	Soil and water contamination by improper disposal of construction and demolition waste.	<ul style="list-style-type: none"> Ensure immediate transportation of accumulated waste to an identified site. 	Contractor/ Project Implementing Agency	SPMG/ PMG
	Damage to standing crops due to construction activities.	<ul style="list-style-type: none"> Construction activities shall be planned so as not to damage any crops. In case if it is inevitable provide monetary compensation to the owners Immediately transport accumulated construction waste to a site identified for the purpose. 	Contractor / Project Implementing Agency	SPMG/ PMG
	Temporary flooding due to excavation during monsoons.	<ul style="list-style-type: none"> Provide suitable arrangements for drainage control. 	Contractor / Project Implementing Agency	SPMG /PMG
	Noise, vibration and dust from construction activities.	<ul style="list-style-type: none"> Use of less noise generating equipment for all activities, provision for personal protective equipment, ear muffs, etc. for construction; avoid construction activities during nights; and sprinkle water on site and remove excess matter from the site as soon as possible. 	Contractor / Project Implementing Agency	SPMG / PMG
	Safety hazards to labor.	<ul style="list-style-type: none"> Provide adequate safety precautions such as helmets, safety shoes, gloves, etc. 	Contractor / Project Implementing Agency	SPMG/ PMG
Laying of sewer network *	Spillage of fuel and oil	<ul style="list-style-type: none"> Store tanks and drums for excess capacity; forbid pouring into soils or drains; enforce adequate equipment maintenance procedures 	Contractor / Project Implementing Agency	SPMG/ PMG
	Noise and vibration disturbances to residents and	<ul style="list-style-type: none"> Establish schedule and other specific restrictions; limit work to daylight hours as 	Contractor / Project Implementing	SPMG/ PMG

Activity	Potential Negative Impact/Concern	Mitigation Measures	Responsible Agency for Mitigation	Monitoring Agency
	businesses	possible; use of less noise generating equipment, proper maintenance	Agency	
Laying of sewer network *	Dust generation	<ul style="list-style-type: none"> Water sprinkling, removal of excess materials, cleaning of sites upon completion of activities. 	Contractor / Project Implementing Agency	SPMG/ PMG
	Reduced pedestrian and vehicle access to residences and businesses	<ul style="list-style-type: none"> Establish work sequence and methods to minimize access disruption; provide alternative safe access as possible; temporary bridges and crossings, detours and walkways. 	Contractor / Project Implementing Agency	SPMG/ PMG
	Temporary water supply interruptions	<ul style="list-style-type: none"> Establish coordination procedures for cut-off; minimize time for replacement operations; and appropriate scheduling as necessary. 	Contractor/ Project Implementing Agency	SPMG/PMG
	Increased traffic inconvenience (emissions, congestions, longer travel times)	<ul style="list-style-type: none"> Use alternate traffic routing; ensure coordination with local authorities; routine control and maintenance of equipment. 	Contractor/ Project Implementing Agency	SPMG and Traffic Police
Construction Camps*	Health impacts due to absence of housing and sanitation facilities in labour camps.	<ul style="list-style-type: none"> Provision of appropriate housing, water supply, and sanitation facilities. 	Contractor / Project Implementing Agency	SPMG/PMG
	Impacts on surrounding environment due to improper drainage and solid waste management facilities in construction camps.	<ul style="list-style-type: none"> Provide proper temporary drainage and solid waste collection and disposal facilities at the construction site. 	Contractor / Project Implementing Agency	SPMG/PMG
<ul style="list-style-type: none"> C. Operation Phase 				
Treatment and Disposal ***	Impairment of receiving water quality in surface/sub-surface source due to inadequate /inefficient treatment. Contamination groundwater supplies due to leaching and impact on soil and agriculture	<ul style="list-style-type: none"> Monitor the treated sewage/effluent quality and ensure compliance with PCB standards for effluent disposal into surface water bodies, on land or for the agricultural use. The treated water quality shall comply with the standards laid down by the state pollution control board for 	Operator/ EA	SPMG /PMG

Activity	Potential Negative Impact/Concern	Mitigation Measures	Responsible Agency for Mitigation	Monitoring Agency
		disposal onto the land, water body or for irrigation use.		
Treatment and Disposal ***	Problems arising due to bad odour, insects, polluted air, noise pollution, etc.	<ul style="list-style-type: none"> Provide buffer zones in the form of green belt around the STP; to be ensured during the design and development phase itself. 	Operator/ EA	SPMG /PMG
	Indiscriminate disposal of sludge leading to contamination of land and soil.	<ul style="list-style-type: none"> Prepares a sludge disposal plan and adheres to the same. 	Operator/ EA	SPMG /PMG
	Health and safety of workers due to the release of toxic gases and hazardous material.	<ul style="list-style-type: none"> Ensure safe operation and maintenance practices are followed, and plans for emergencies are in place. 	Operator/ EA	SPMG /PMG
	Reduced land values in nearby areas and aesthetics affected.	<ul style="list-style-type: none"> Adequate buffer zones during development and construction phase should mitigate the affect considerably. 	EA	SPMG /PMG

Note: *** denotes – Significant Impact; ** Denotes-Moderate Impacts and *- Minor Impact.

Annexure III

Roles and Responsibilities of Social Development Specialists

LEVELS	ROLES and RESPONSIBILITIES
PMG Social Development Officer	<ul style="list-style-type: none"> • Finalize ESMF; • Provide policy guidance to the state level counterparts • Ensure dissemination of R&R Policy at national level • Monitoring R&R and Land acquisition activities. Make budgetary provisions for R&R activities • Liaison with state administration for land acquisition and implementation of RAP; • Participate in state level meetings • Finalize TOR of contracting NGO for implementation and external agency for monitoring and evaluation • Prepare training schedule for state and project level social development officials for capacity building to implement the RAP; • Prepare TOR for any studies required and qualitative dimensions to the implementation of RAP; • Facilitate appointment of consultants to carry out the studies and co-ordinate them. • Monitor physical and financial progress on implementation of RAP;
SPMG – Social Development Officer	<ul style="list-style-type: none"> • Co-ordinate with district administration and NGO responsible for implementation of ESMF/ RAP; • Translation of R&R policy in local language and ensure dissemination at state; district and community level - prepare pamphlets on policy for information dissemination • Coordinate with the state and district level officials for acquisition of private land and implementation of ESMF/ RAP; Liaison with district administration for dovetailing of government schemes for Income Restoration Schemes • Monitor physical and financial progress of implementation of RAP, • Participate in the project level meetings • Report progress, highlighting social issues not addressed, to provide for mid-course correction, • Coordinate training of project level staff with agencies involved. • Organise by-monthly meetings with NGO to review the progress of R&R, Tribal people and gender actions

LEVELS	ROLES and RESPONSIBILITIES
Project Level – Executing Agency (EA)	<ul style="list-style-type: none"> • Disclosure of RAP and entitlements and also ensure that copies are made available to the PAPs; • Oversee land availability and coordinate with local revenue official for land acquisition • Dissemination of Project Information at various stages of project as envisaged in the ESMF/ RAP • Ensure community involvement in every stage of the sub project • Documentation and disclosure of consultations • Shall be first level of grievance redressal and will guide PAPs further to redress their grievances • Ensure disbarment of compensation and / or entitlements as per schedule • Responsible for addressal of additional unforeseen impacts during construction • Ensuring incorporation of social issues in DPRs • Supervising the ESMF tasks during implementation & its progress • Collect data pertaining to the evaluation and monitoring indicators • Will prepare monthly progress report and quarterly process documentation report
Social Specialist of Supervision Consultants	<ul style="list-style-type: none"> • Ensure social screening of investments; • Implement the agreed social mitigation measures; • Ensure compliance of national and other applicable laws and Acts pertaining to social, • Sensitize and help build capacity of the EA officials towards the implementation of the ESMF provisions. • Assist Environment and Social Development Officer of EA in preparing monthly progress and quarterly process documentation reports
NGO	<ul style="list-style-type: none"> • Conduct the verification for the affected families and update the census and socio-economic data • Develop rapport with PAFs and between PAFs and EA • Design and carry out information campaign and consultations with the local community during the implementation of the RAP, • Provide information to PAFs and local community and conduct awareness on R&R Policy and distribute the policy to the affected families • Prepare and submit the micro plans for the PAFs • Assist the PAFs in receiving the compensation and rehabilitation assistance • Motivate and guide PAP for productive utilization of the compensation and assistance amount • Assess the level of skills and efficiency in pursuing economic activities, identify needs for training and organize training

LEVELS	ROLES and RESPONSIBILITIES
	<p>program</p> <ul style="list-style-type: none"> • Assist PAFs in approaching the grievance redressal mechanism • Assist the PAFs in getting benefits from the appropriate local development schemes • Prepare monthly progress reports and participate in monthly review meetings • Participate in the training program for capacity building • Carry out other responsibilities as required from time to time

Annex IV

Sample Terms of Reference for Environmental and Social Audit of NGRBA Program Investments

1. Background:

The National Ganga River Basin Authority with an objective to ensure no entry of polluted water into the River Ganga is supporting number of pollution prevention and river conservation activities in the five basin states of UP, Bihar, Jharkhand, West Bengal and Uttaranchal.

NGRBA program believes that each of its investments will improve living standards and the environment of the River in and around project locations. NGRBA program is committed to implementing these activities in an environmentally sound, socially acceptable way. This has reflected its environmental and social commitments through its Environmental and Social Management Framework (ESMF). All investments financed by NGRBA program should be in consonance with its ESMF.

2. Objectives:

- To audit the conformity of environmental and social categorisation of investments approved by the NGRBA during the Financial Year _____, with respect to the categorisation prescribed in the ESMF of NGRBA program
- To audit the compliance of the environmental and social aspects of approved investments, which are under implementation.

3. Outline of the tasks to be carried out:

The, following tasks are to be carried out:

(a) To Audit the Environmental and Social Categorisation of Approved Investments:

The audit process will check the conformity of environmental and social categorisation of investments approved by the NGRBA with respect to environmental and social categorisation in the ESMF of NGRBA program (i.e.) whether the Environmental and Social categorisation specified for the approved investments are in conformity with environmental and social categorisation specified in the ESMF.

(b) Auditing the compliance of the Approved Investments:

The audit process will check the compliance of environmental and social aspects during construction, operation and maintenance of investments approved by NGRBA program, across all categories and different sub-project locations. Adequacy of the ESMP (including RAP, where relevant)

Audit the adequacy of the ESMP (including RAP, where relevant) and recommend practicable measures to include/improve the management measures and the agency responsible for carrying out the measures, wherever found inadequate. The best practices and possible environmental and social enhancement measures with respect to the audited investments will be documented.

(c) Reporting

To review the status report submitted by the project Management consultant on the implementation of ESMP (including RAP, where relevant) and the process adopted by design consultants in identification and mitigation measures while preparing the DPRs. To report on the adequacy and timely submission of the Quarterly Progress Reports including the process involved in addressing the risk management.

(d) Audit Report

The findings of the review and audit should be summarized in a tabular form and will include compliance, non-compliance, best practices and enhancement measures along with the name of the agency responsible for each of the above. In case of non-compliances, the consultants need to undertake a follow up visit after giving sufficient time (depending on the type of corrective measures) for the agency responsible to take corrective actions.

4. Final outputs (i.e., Reports, drawings etc.). That will be required of the Consultant;

- Environmental and Social Audit Reports indicating conformity of investments approved by NGRBA, relating to the financial year _____, with ESMF Framework.
- Environmental and Social Audit report indicating the conformity to agreed standards during construction, operation and maintenance of the approved investments.

COMMUNICATIONS & PUBLIC OUTREACH FRAMEWORK

The need for revamping the national river conservation programme was recognised and it was decided that an integrated approach based on river basin as the unit of planning and institutional redesign may be adopted. Accordingly, the Government of India has given Ganga the status of a National River and has constituted the National Ganga River Basin Authority (NGRBA) on 20th February 2009 under Section 3(3) of the Environment (Protection) Act, 1986.

The NGRBA is a planning, financing, monitoring and coordinating body of the centre and the states. The objective of the NGRBA is to ensure effective abatement of pollution and conservation of the river Ganga by adopting a river basin approach for comprehensive planning and management.

The Communication and Public Outreach Strategy and Plans will be in furtherance of the objectives of the NGRBA Program to ensure effective abatement of pollution and conservation of the river Ganga through strategic communication and enhanced public participation and outreach.

Wide range of views, concerns, and sensitivities: There are a wide range of stakeholder views, concerns and sensitivities that need to be taken into account on Ganga. Stakeholders include religious opinion leaders and Hindu clergy; state governments and government officials; local industry; environment-focused NGOs and community-based organizations; academics and research scholars; the media; youth; local communities that depend on the river; and millions living elsewhere in India for whom the river is an iconic religious and cultural symbol. While most stakeholder concerns and sensitivities are long abiding, they are currently in prominent play as concerns over the deteriorating quality and quantity of water in the Ganga have come to the forefront of attention in the media and in civil society. There is a high level of concern across stakeholder groups about the levels of pollution in the river and its deleterious effects on people's lives and livelihoods.

Importance of public participation: There is widespread recognition that the success and sustainability of NGRBA Program hinge on high levels of public participation. The scope of the Program calls for broad-based public support to encourage real behavioral change among stakeholders. The involvement of various stakeholders will be especially crucial in the case of specific investments, where the speed of implementation and long term sustainability will depend significantly on the support and participation of local stakeholder groups including affected communities, elected representatives and community leaders. A strategic communications and outreach plan will be crucial for generating public awareness about the Program and mobilizing widespread participation.

Communications Needs Assessment: The development of the Communications Strategy is envisaged as a phased initiative, with the first exercise being in the form of a detailed Communications Needs Assessment. This Assessment is expected to identify all relevant stakeholder groups and provide insight into their concerns about, expectations of, and relationship with the NGRBA program. In the second phase, this exercise will enable the formulation of a strategic communications approach to reach out to these stakeholder groups with messages, campaigns and programmes, and through media best

expected to resonate with them and ensure their active involvement and participation at different levels.

Components of Communications Strategy: It is envisaged that the communications strategy and general approach for a program of this scale and profile will require an effective mix of mass communications, general and targeted advocacy, community mobilization, and social messaging. The tools will range from mass media to social advertising, direct interaction, media engagement and the development of platforms and champions, especially at the state and local levels. Communications strategy will include:

- (a) Mass communication campaigns: These campaigns will be focused on pollution control messages, (especially ‘Dos & Don’ts’ of human interactions with the river) and sensitization of the general public. This will need to take in traditional material (television films, radio spots, print materials, etc) as well as innovative information dissemination media like the use of local folk media, as well as persuasion/ outreach/ activities through NGOs, schools and colleges, temples and fairs etc.
- (b) Support for voluntary public participation: The special space the Ganga occupies in the cultural and religious psyche of people in India provides a tremendous opportunity for tapping this reverence and harnessing it into a people’s movement. Mobilising the masses will not only generate a continuing demand for clean-up and conservation activities but will also enhance wide participation in the planning, design, implementation and, especially, monitoring of activities proposed under the Program. Community mobilisation will thus form an essential part of the Communication Strategy.
- (c) Proactive Disclosure, such as:
 - i. Right to Information (RTI) compliance.
 - ii. Websites at PMG and SPMGs levels.
 - iii. Public Information Cells at the EAs level.
 - iv. Information Boards/Walls at the level of the individual works.
- (d) Community participation, such as:
 - i. Provisions for conferences, workshops, seminars at the national, state and ULB’s level to bring stakeholders together for discussion, dialogue and information dissemination.
 - ii. Participation of community and citizen groups via ULB-level Citizens’ Monitoring Committees for monitoring, feedback and social audits.

Social Intermediation and Outreach around Specific Investments: The involvement of stakeholders will be especially crucial in the context of individual investments, where implementation and sustainability also depend on the support and participation of local stakeholder groups. The response of local communities on issues like willingness to connect to sewers and pay for services will be crucial for the long-term success of the program. Stakeholders’ perceptions indicate a high-

level of demand at the grassroots level for greater transparency and for active involvement in the proposed operations. Therefore, in addition to overall strategic communication efforts, all major investments will have social intermediation interventions to engage with local communities and key stakeholders to ensure their inclusion and participation in the planning, implementation and subsequent management of the investments.

The social intermediation activities which can be a standalone or a part of Environmental & Social Assessments will be carried out in two parts. The first part will focus on developing an intermediation strategy and action plan for the city where the major investments are planned. The second part will implement the social intermediation processes in the concerned ULBs utilizing the services of local NGOs or other community based organizations (CBOs). This work will be carried out in close liaison with executing agencies, ULBs, Citizens' Monitoring Committees, and local communities.

ULB-level Citizens' Monitoring Committees (CMCs): The CMCs are intended to serve as a transparency mechanism on flow of program-related information to citizens and key stakeholders and to garner their feedback on program processes. These voluntary bodies, to be constituted, would include government officials from the state government as well as the EAs; local elected members of the ULB; representatives of prominent local institutions (academic, research); other prominent citizens; as well as representatives from industry, voluntary organizations, media, etc. The CMC will function as a platform for program authorities to interact with civil society and will meet at least once in every six months to provide updates on the progress of the program and to hear suggestions, issues and problems put forward by citizens and civil society.

Ganga Innovation Projects: Funding will be available to finance small-scale innovative proposals aimed at reducing and preventing pollution in the river. These proposals could cover a wide range of activities from innovative pollution-prevention methods, awareness campaigns, community driven initiatives, data collection/analysis exercises etc. Large infrastructure projects will not be eligible for these grants. Specific guidelines, criteria and other operational modalities will be worked out by the PMG. These proposals will be scrutinized by a committee constituted by the PMG which will select proposals to be funded as a grant.

Social Audits: Social Audits will be conducted through the Citizens' Monitoring Committees.

Stakeholder Workshops and Seminars. State and National level workshops will be held regularly to engage key stakeholders in constructive debate on issues, challenges, and opportunities emerging from implementation of the Program. The workshops will be managed and coordinated by the PMG with close engagement from the relevant SPMGs and Citizens' Monitoring Committees.

GOVERNANCE AND ACCOUNTABILITY ACTION PLAN (GAAP)

The need for revamping the national river conservation programme was recognised and it was decided that an integrated approach based on river basin as the unit of planning and institutional redesign may be adopted. Accordingly, the Government of India has given Ganga the status of a National River and has constituted the National Ganga River Basin Authority (NGRBA) on 20th February 2009 under Section 3(3) of the Environment (Protection) Act, 1986.

The NGRBA is a planning, financing, monitoring and coordinating body of the centre and the states. The objective of the NGRBA is to ensure effective abatement of pollution and conservation of the river Ganga by adopting a river basin approach for comprehensive planning and management.

Need for a Governance and Accountability Action Plan: The Governance and Accountability Action Plan (GAAP) is to minimize accountability risks to the NGRBA Program. Specific arrangements have been proposed to mitigate these risks and to ensure that funds are used effectively and efficiently. The main purpose of the GAAP is to ensure that the NGRBA Program's objectives are achieved.

Mitigation Measures:

This GAAP summarizes the mitigation measures being taken as a part of program. The mitigation measures are grouped into three categories: (i) implementation arrangements; (ii) transparency and citizen voice; and (iii) grievance redressal.

1. Implementation Arrangements

- i. ***Mitigating institutional ineffectiveness through strong apex and operational entities.*** The challenge of institutional effectiveness has been addressed at both the apex and operational levels. At the apex level, cross-sectoral coordination has been built into the NGRBA through the composition of the Authority. The NGRBA has been established as a collaborative institution of Central and state governments. It is chaired by the Prime Minister, and members include key GoI ministers and the Chief Ministers of the five basin states. NGRBA also has representation of nine non-official members from civil society and academia, and from a range of expertise. The NGRBA has been created under the Environment Protection Act and has a strong legal mandate with absolute powers for effective abatement of pollution and conservation of the Ganga.
- ii. ***Strong and empowered operational entities at the Central and State level. At the operational level, the NGRBA “may evolve an appropriate mechanism for implementation of its decisions,” the PMG and SPMGs are being created as dedicated institutions for operationalization and implementation of the NGRBA Program. They will have the requisite powers, functions, capacity, and staff needed to coordinate effectively across a large basin area, improve the quality of investment preparation, and deliver the program. They are currently being established as registered societies with the structures, staffing plans, financial autonomy, and single-point accountability required.***
- iii. ***Strengthening weak ULBs and environmental regulators.*** The ULBs and environmental regulators will be strengthened through a combination of capacity building measures and protection of assets created.

- iv. **Selection of EAs.** The Executing Agencies' selection criteria would be as mentioned in the Implementation Arrangements.

2. Transparency & Citizen Voice

- i. **Disclosure and dissemination of information.** Municipality Disclosure Act, RTI and NGRBA guidelines on stakeholders' consultation would be adhered for the purpose of information dissemination. Citizen voice is strongly supported through the project principles of (i) disclosure of information on a regular basis to the public, and (ii) genuine stakeholder consultation and engagement on specific investments. This is particularly important to address the main risks associated with transparency. NGRBA program websites are being designed for information disclosure and dissemination on all aspects of the program.
- ii. **Use of Social Audits.** Social Audit, a viable instrument of sustainable program delivery, is in fact People's Audit, which provides a succinct view of performance based on society's perceptions and analysis at large. Citizen's Monitoring Committee will perform Social Audit in a manner prescribed by the Government of India.
- iii. **Adherence to the RTI Act.** In addition, in compliance with the requirements of the Right to Information (RTI) Act (2005), the project shall provide information voluntarily and on demand as prescribed by law. Under RTI Act, the project will ensure proactive disclosure and sharing of information with key stakeholders, including with communities and beneficiaries. The disclosure applies to all public project related documents, including but not limited to project components and sub-components, cost estimates, procurement plans, details of tender notices, details of award of contracts and contract amounts, selection of consultants, and details of officials implementing the project.
- iv. **Grievance Redressal**
 - a) **Purpose of grievance redressal.** The purpose of a robust and responsive grievance redressal is to ensure that any query or complaint with regard to any aspect of project implementation is fairly heard and promptly addressed. The development of an integrated system will enable the integration of feedback from the public, effective handling of complaints, and immediate automatic updates on the status of response. It will also ensure the coordination of Center and State so that one system exists for the grievances redressal.
 - b) **An integrated grievance redressal system.** An integrated system will be established with Grievance Redressal Cells (GRCs), with necessary officers, officials and systems, at the local EAs, ULBs, SPMGs and the PMG levels. Grievances may be submitted through various mediums, including in person, in written form to a noted address, through a toll free phone line or through direct calls to concerned officials, and online. All local contact information and options for complaint submission will be available on site on local information boards.
 - c) Moreover, they will be in addition to the PIO officers to be appointed under the RTI Act. Under GAAP, a half yearly report on Grievance Redressal by the PMG, SPMG and EA will be prepared.

3. Inspections and Audits:

Third Party Inspection agencies will carry out quality assurance and review the investment implementation on the basis of the detailed on-site review, examination of

appropriate documents and discussions with EAs and other stakeholders. Financial audits, internal and external, will be conducted throughout the project to ensure high quality of all project-financed activities and investments.

TEMPLATE

MEMORANDUM OF AGREEMENT

(*[Name of the City]*-**Program-MoA**)

Among

NGRBA/NMCG

and

State Government /SPMG

and

Urban Local Body/Municipal Corporation

National Ganga River Basin Authority

March 2011

NGRBA PROGRAM
MEMORANDUM OF AGREEMENT
(Program-MOA)

among

National Ganga River Basin Authority (NGRBA)
Through **National Mission Clean Ganga (NMCG)**

And

The Government of *(Name of the State)*

Through *(Name of the State)* **State Project Management Group (SPMG)**

And

URBAN LOCAL BODY (ULB)/Municipal Corporation of *(Name of the City)*

This MOA provides a framework of commitments by all stakeholders for successful implementation of the NGRBA program, including ownership of assets and proper operation and maintenance of such assets created.

This agreement lays down the terms & conditions and responsibilities of the National Mission Clean Ganga, hereinafter named as **NMCG**, State Project Management Group hereinafter named as **SPMG**, Government of (the name of the state) and the Urban Local Body/Municipal Corporation hereinafter named as **ULB** of (name of the city) for the proper and adequate implementation of the NGRBA program at the city [*Name of the City*].

THIS AGREEMENT is made on this _____ day of _____ 2011 between the NGRBA through NMCG, (address of NMCG/SPMG)

and

The Government of *(Name of the State)* through its _____ (Name of the Department), (address of the Department)/SPMG

and

The Urban Local Body/the Municipal Corporation of (Name of the City), (address).

PART -A

WHEREAS for the purpose of this agreement, it is mandated that:

1. The National Ganga River Basin Authority, Ministry of Environment & Forest, Government of India, hereinafter named as **NGRBA**, is represented and operating through its executive wing NMCG at national level for implementing the NGRBA program.
2. The NGRBA will provide its share of financial support through NMCG to the SPMGs for the proper implementation of the NGRBA program.
3. The Government of *(Name of the State)* is represented by the Department of *(Name of the Department)* and through SPMG *(Name of the State)*.
4. The State Government will provide the agreed State's share of the capital cost of the investment to SPMG of *(Name of the State)*.
5. The ULB/Municipal Corporation of *(Name of the City)* is represented by the Mayor/Chairman or the Municipal Commissioner or the Executive Officer of the ULB/Municipal Corporation of *(Name of the City)* .
6. The ULB/Municipal Corporation of *(Name of the City)* will provide necessary all out support for preparation, implementation and full operation and maintenance (O&M) of the NGRBA program.
7. The State Executive Committee (SEC) of the State River Conservation Authority (SRCA) headed by the Chief Secretary of the State Government will review the progress of the NGRBA program implementation on half-yearly basis. A representative nominated by or of NMCG/NGRBA will be a member of this Committee.
8. The NMCG/NGRBA or any person/agency nominated by them, shall undertake periodic site visits to ascertain the progress of the ongoing investments and compliance with the requirements of the NGRBA program framework and investment.
9. The SPMG will coordinate, as and when needed, with the ULB, the EA, and the government departments such as SPCB, as well as other agencies to ensure synergy with other relevant programs, such as JNNURM, UIDSSMT and NRCP.
10. The NGRBA/NMCG and the State Government/SPMG will consider the satisfactory progress in achieving agreed targets of the O&M financing plan as an important basis for consideration of subsequent investments in that ULB/Municipal Corporation under the NGRBA program.

11. The NMCG will set up the mechanism for concurrent evaluation and monitoring of the investments, including third party inspections, quality assurance surveys, technical audits, social audits, continuous internal audits, and statutory audits. The State Government, the SPMG, the ULB/ Municipal Corporation and the EA will facilitate for all these mechanisms and shall provide all necessary access and support.
12. The NMCG will appoint statutory auditors to conduct the annual audit of the NGRBA program. The funds of NGRBA program are liable to statutory or any other audit/s by the Controller and Auditor General of India.
13. The NMCG has prepared and adopted the NGRBA Program Frameworks and Guidelines, all of which will be applicable to activities undertaken by SPMGs, ULBs and EAs.
14. In case of any breach of this Investment-MoA by any of its signatories, the NMCG, or the SPMG under intimation to NMCG, shall be entitled to withhold release of subsequent installments, on the project specific basis, until the issue is resolved to the satisfaction of NMCG.

PART –B

PARTIES signatory to this agreement hereby resolve to commit that:

1. The NGRBA, Ministry of Environment & Forest, Government of India, through NMCG will finance 70% and the State Government will finance 30% of the capital cost of investments of the NGRBA program, with the exception of industrial pollution management investments.
2. Based on the agreed Annual Action Plan, the NMCG and the State Government of (Name) will release their agreed share of funds to the SPMG of (Name of the State).
3. The State Government of (Name) will release its share of funds, within two weeks' time, in proportion to the fund releases made by the NMCG/NGRBA.
4. The State Government and the ULB/Municipal Corporation will fulfill all the requirements and take all actions to ensure timely availability of land, free of all encumbrances, for preparation, implementation and full O&M of the NGRBA program investments and all works under the program.
5. The State Government through the District administration and the ULB/Municipal Corporation will undertake all necessary actions including land acquisition, if required, to ensure timely availability of encumbrance's free land for the purpose of the NGRBA program to be availed to the EA, as per the implementation schedule.

6. The State Government and the ULB will implement the Resettlement Action Plan (RAP) for the Activity, approved as part of the Detailed Project Report (DPR), in an effective and timely manner as described in the RAP.
7. The State Government and the ULB/Municipal Corporation will ensure that all the necessary clearances from various departments, agencies and/or authorities are provided to the EA for successful and timely completion of NGRBA program.
8. The State Government will ensure that the District administration forms the City level Citizens Monitoring Committee/Forum, under information to the SPMG in coordination with the ULB, to meet once at least half-yearly, for public information sharing, discussion, feedback and program implementation review.
9. The NMCG and the State Government, in case of municipal wastewater management and river front management investments, will bear the O&M costs for the first 5 years from the date of commissioning of the investment in the same agreed ratio of 70:30, as described above. Thereafter, the ULB shall finance the total O&M cost.
10. The ULB/Municipal Corporation will assume ownership of all works and assets completed and created under the NGRBA program within its jurisdiction and will ensure its sustainable O&M in future years.
11. The ULB/Municipal Corporation of (Name of the City) and the State Government of (Name of the State) will own functional responsibility, jointly and severally, of O&M of the created assets and associated systems.
12. The ULB/Municipal Corporation of (Name of the City) will put through the mechanisms for raising resources for O&M of assets and associated systems, as proposed in the O&M financing plan stated and agreed in the DPR.
13. The State Government of (Name of the State) will meet any shortfall in the ULB/Municipal Corporation of (Name of the City) financing of the O&M costs of the created assets and associated systems beyond five years.
14. The State Government/SPMG and the Executing Agency will take all necessary actions to ensure completion of investments without time and/or cost overruns.
15. The State Government of (Name of the State)/the ULB/Municipal Corporation of (Name of the City) shall bear any cost overrun over and above the total sanctioned cost of DPR as a whole.
16. The ULB/Municipal Corporation will undertake all necessary actions to ensure timely completion of 100% connections (residential/commercial /other establishments) with the sewerage networks, thereby ensuring the flow of all wastewater in the networked area so that it is intercepted and conveyed to the

treatment systems. Such actions may require community mobilization, requisite changes in municipal bylaws, household-level separation of storm water and wastewater flows.

17. The ULB/Municipal Corporation and the SPMG are to implement all their respective activities (according to the NGRBA framework) related to Investment in [Name of City], after the Feasibility Report (FR) is approved by the SPMG and the NMCG. These activities may include arrangements for an all encumbrances free land, preparation of local/city specific communication campaign, etc. [*Insert any other activity required.*]
18. The SPMG in consultation with the ULB, has to entrust execution of the whole or relevant parts of the works, supply and installation related to the Investment to the EA.
19. The SPMG, in agreement with the State Government and the ULB/ Municipal Corporation will appoint the Executing Agency (EA) for each investment project.
20. The SPMG and the EA will be responsible for implementation, monitoring and reporting under the NGRBA program, including coordination with state-level agencies.
21. The SPMG shall release subsequent installments of funds to EA on performance based appraisals as per the agreed terms & conditions, against submission of physical and financial progress reports and proper Utilization Certificates as well as on fulfillment of commitments as set out in Investment-MoA.
22. The SPMG will consolidate the physical progress reports, financial/ expenditure reports and Utilization Certificates furnished by the EAs, and submit to the NMCG, in the prescribed formats, on a quarterly basis.
23. The SPMG will ensure that all proposed investments for NGRBA program funding have O&M plans with fully assured financing.
24. Any expenditure above the sanctioned DPR cost that includes standard physical and price contingencies, arising from whatever reasons, will be borne by the State Government and/or the ULB/Municipal Corporation of (*Name of the City*).
25. During the administration of various contracts, under an approved DPR, the EA will be able to approve any contract variation in the order up to a cumulative ceiling of 5 per cent of the value of the contract subject to prior concurrence of the SPMG. For any variation in the order up to a cumulative ceiling of above 5 per cent but less than 15 per cent of the value of the contract shall be approved by the SPMG; and any cumulative variation of more than 15 per cent will require additional concurrence and approval of the World Bank {for World Bank financed investments only} under intimation to NMCG.

26. All payment, expenditure, accounting and auditing will be as per the Financial Management Manual of NGRBA/NMCG. The SPMG (and as required the EA, as far as incremental operating costs and direct expenditures by the EA are concerned) will maintain the cash book, the general ledger and the “payment order” issue registers, under double-entry procedure as relevant, in a manner prescribed by a charter of accounts by the NMCG so that the SPMG/EA accounting is in conformity with the computerized accounting system adopted by the NMCG for the NGRBA Program. The original bills and vouchers would be retained and filed separately by the EA to be audited as specified in the Financial Management Manual of NGRBA/NMCG.
27. The SPMG will ensure that the EA arranges to maintain a proper record of project designs, as built drawings, technical specifications, and operation and maintenance manuals, both in soft and hard copies, in requisite numbers at the archive/library of the Ganga Knowledge Centre (GKC), the NCMG and the ULB/Municipal Corporation to facilitate future references.
28. The SPMG will provide No Objection Certificate (NOC) on the Activity Completion Report submitted by the EA of the works for all investments after proper/adequate invigilation of standards/parameters and arrange for the protocol for the transfer of the same to the ULB/Municipal Corporation under intimation to the NMCG.
29. The SPMG will facilitate payments on schedules and do needful to observe the demonstration of performance guarantee parameters.
30. The SPMG will ensure that the EA commits to take up all the necessary measures to ensure safety and security of the works and workers during implementation and O&M of the NGRBA program.
31. This Memorandum of Agreement shall terminate if any of the parties terminates it with mutual consent of the other parties. The NMCG in consultation with the SPMG shall however have the right to terminate this Memorandum of Agreement and stop further funding at any stage if (i) the progress of execution of the Investment is found to be unsatisfactory, or (ii) financial irregularities in the execution of the Investment have occurred, at any stage.
32. In case of dispute between the parties, the issue will be resolved through mutual discussions. All the three parties will make best efforts to settle the dispute that may arise out of or in connection with any aspect of this Memorandum of Agreement through mutual and amicable consultation. However, if there is need to terminate this agreement or, if the dispute is not settled through such consultation, the decision of the Secretary, Ministry of Environment & Forest, Government of India will be final and binding in all settlements of disputes to all the Parties.
33. This Agreement, its meaning and interpretation and the relations among the parties shall be governed by the laws of the Union of India.

In witness whereof, the parties hereto have caused this Memorandum of Agreement be signed in their respective names as below and shall be in effect from (the day, date) first above written:

SIGNATORIES

For the NGRBA, Ministry of Environment and Forests, Government of India through the Joint Secretary, Ministry of Environment and Forests who is also the Mission Director of NMCG.

For the State Government of (Name of the State), the Secretary of the Nodal Department, Government of (Name of the State) who is also the Executive Chairperson of SPMG.

For the ULB/Municipal Corporation of (Name of the City), the Mayor/Chairman or the Municipal Commissioner or the Executive Officer of (Name of the City).

Witness I

Witness II

TEMPLATE

MEMORANDUM OF AGREEMENT

([Name of the Investment/City]-**Investment-MoA**)

Among

SPMG/State Government

and

Urban Local Body/Municipal Corporation

and

Executing Agency

National Ganga River Basin Authority

March 2011

NGRBA PROGRAM
MEMORANDUM OF AGREEMENT
(Investment-MOA)

among

State Project Management Group (SPMG) of (Name of the State)

And

Urban Local Body (ULB)/Municipal Corporation of (Name of the city)

And

The Executing Agency (Name of the Executing Agency)

This MOA provides a framework of commitments by all stakeholders for successful implementation of the NGRBA program at investment level.

This agreement lays down the roles, responsibilities, obligations, commitments of and terms & conditions for the State Project Management Group (hereinafter named as **SPMG** which shall mean and include its successors, administrative executors and assigns of the First Party) representing the Government of (the name of the State); the Urban Local Body/Municipal Corporation of (Name of the city) (hereinafter named as **ULB** which shall mean and include its successors, administrative executors and assigns of the Second Party); and the Executing Agency (hereinafter named as **EA** which shall mean and include its successors, administrative executors and assigns of the Third Party), for the proper and adequate implementation of the NGRBA program at the planning, preparation, execution and operation and maintenance (**O&M**) levels of works [Name of Investment] (hereinafter referred to as the “**Activity**”).

The Government of India has created the National Ganga River Basin Authority (NGRBA) with the objectives of (a) ensuring effective abatement of pollution and conservation of the river Ganga by adopting a river basin approach to promote inter-sectoral co-ordination for comprehensive planning and management; and (b) maintaining minimum ecological flows in the river Ganga with the aim of ensuring water quality and environmentally sustainable development. The NGRBA is operating through its

executive wing named as the National Mission Clean Ganga, hereinafter referred to as the **NMCG**.

The Government of [State Name] through the Department of Urban Development has established the [Name of the State] State River Conservation Authority (**SRCA**) to lead the program in the state in close coordination with NGRBA and with SRCAs in other Ganga Basin States. To fulfill this objective, the State Government of (Name of the State) has created the State Project Management Group (SPMG) as (Name of the State Society).

The NGRBA/NMCG, the State Government of (Name of the State)/SPMG and the ULB [Name of the ULB] have already signed a Memorandum of Agreement, hereinafter referred to as the “(Name of the City) Program-MOA” for implementation of the NGRBA Program in the city of [Name of the City].

All the provisions of this Memorandum of Agreement (MoA-Investment) shall deem to be consistent with the “(Name of the City) Program-MOA”. In the event of any inconsistency between the two, the provisions of the “(Name of the City) Program-MOA”, will govern.

THIS AGREEMENT is made on this _____day of_____2011 between the SPMG of (Name of the State), (address of SPMG)

and

The Urban Local Body/ Municipal Corporation of (Name of the City), (address).

and

The Executing Agency (Name and address of the Executing Agency).

PART-A

WHEREAS for the purpose of this agreement, it is mandated that:

1. The National Ganga River Basin Authority, Ministry of Environment & Forest, Government of India, hereinafter named as **NGRBA**, is represented and operating through its executive wing NMCG at National level, for implementing the NGRBA program and will provide its share of financial support through NMCG to the SPMGs for the proper implementation of the NGRBA program.
2. The Government of (Name of the State) is represented by the Department of (Name of the Department) is to:
 - a) Provide the agreed State's share of the capital cost of the investment and that of O&M of the completed Activity.
 - b) Ensure that the District administration should form the City level Citizens Monitoring Committee/Forum, under information to the SPMG and in coordination with the ULB, to meet once at least half-yearly, for public information sharing, discussion, feedback and program implementation review.
3. The SPMG (Name of the State) will be represented by the Program Director is to:
 - a) Provide the State Annual Action Plan to NMCG and according to the approved Plan will facilitate flow of funds as per the approved funding patterns and procedures in time for the implementation of the NGRBA program.
 - b) Receive funds for approved investments from the NMCG and the State Government on agreed cost ratio; and shall ensure to arrange the State's share of funds within time so that the time and works schedules of the EAs are not adversely affected.
 - c) Appoint the EA for each investment project, in agreement with the State Government and the ULB/Municipal Corporation.
 - d) Be responsible for implementation, monitoring and reporting under the NGRBA program, including coordination with state-level agencies along with the EA as per guidelines of the Financial and Procurement Manuals of NMCG/NGRBA.
 - e) Ensure that all proposed investments for NGRBA program funding have O&M plans with fully assured financing.
 - f) Coordinate with the ULB/ Municipal Corporation, EA and other government departments as well as agencies such as SPCB to ensure synergy with other relevant programs, such as JNNURM, UIDSSMT and NRCP.

- g) Coordinate and witness the transfer of all the works completed and assets created under NGRBA program to the ULB/ Municipal Corporation under intimation to the State Government, as per the protocol led by the NMCG.
4. The ULB/Municipal Corporation of (Name of the City) is represented by the Mayor/Chairman or the Municipal Commissioner or the Executive Officer of the ULB/Municipal Corporation, is to provide necessary all out support for preparation, implementation and full O&M of the NGRBA program.
5. The Executing Agency (Name and address of the EA of the City) will be represented by its head/CEO/chief officer, is to nominate a Nodal Officer of the EA for executing the Activity. The Nodal Officer shall work full-time for the Activity until its completion. The Nodal Officer shall be fully empowered by the EA to make all decisions required to execute the Activity, including:
 - i. submitting the bill of quantities, technical specifications and drawings for the works contracts; technical specifications for the goods contracts; and terms of reference for the consultancy contracts,
 - ii. participating in the procurement committee that will approve the bid documents, shortlist and request for proposals for consultancy services, participating in the bid or technical proposal evaluation committee meetings, and contract negotiation meetings, as relevant,
 - iii. signing contract,
 - iv. all procurement decisions including award for any contract where EA is responsible for the entire procurement process;
 - v. certifying work, approving and releasing payments, contract management, and performance evaluation of contractors and contractual staff employed for the Activity,
 - vi. approving travel requisitions and all such necessary requisitions to complete execution of the Activity in the best professional standard and as per the performance standard for the Activity agreed as per the approved Detailed Project Report (**DPR**).
6. The State Executive Committee (SEC) of the State River Conservation Authority (SRCA) headed by the Chief Secretary of the State Government will review the progress of the NGRBA program implementation on half-yearly basis. A representative nominated by or of NMCG/NGRBA will be a member of this Committee.
7. The NMCG/NGRBA or any person/agency nominated by them shall undertake periodic site visits to ascertain the progress of the ongoing investments and compliance with the requirements of the NGRBA program framework and Investment-MoA.
8. The NGRBA/NMCG and the State Government/SPMG will consider the satisfactory progress in achieving agreed targets of the O&M financing plan as an important basis for consideration of subsequent investments in that ULB/Municipal Corporation under the NGRBA program.
9. The NMCG will set up the mechanism for concurrent evaluation and monitoring of the investments, including third party inspections, quality assurance surveys, technical audits, social audits, continuous internal audits, and statutory audits. The State Government, the

SPMG, the ULB/ Municipal Corporation and the EA will facilitate for all these mechanisms and shall provide all necessary access and support.

10. The NMCG will appoint statutory auditors to conduct the annual audit of the NGRBA program. The funds of NGRBA program are liable to statutory or any other audit/s by the Controller and Auditor General of India.
11. The NMCG has prepared and adopted the NGRBA Program Frameworks and Guidelines, all of which will be applicable to activities undertaken by SPMGs, ULBs and EAs.
12. In case of any breach of this Investment-MoA by any of the signatories, the NMCG, or the SPMG under intimation to NMCG, shall be entitled to withhold release of subsequent installments, on the project specific basis, until the issue is resolved to the satisfaction of NMCG.

13.

PART-B

WHEREAS for the purpose of this agreement, it is accepted that:

1. The SPMG and the ULB are to implement all their respective activities (according to the NGRBA framework) related to [Name of Investment] in [Name of City], after the Feasibility Report (FR) is approved by the SPMG and the NMCG. These activities may include arrangements for an all encumbrances free land, preparation of local/city specific communication campaign, etc. [*Insert any other activity required.*]
2. The SPMG in consultation with the ULB, has to entrust execution of the whole or relevant parts of the works, supply and installation related to the Activity [Name of Investment] to the EA [Name of Executing Agency].
3. The execution of the Activity will be carried out between [DD/MM/YYYY] to [DD/MM/YYYY] or such other time period as agreed among the signatories to this MoA and considered consents of the NMCG.
4. The scope of work and the deliverables will be as per the DPR for the Activity technically sanctioned and approved by the SPMG. Any variation in the scope of work will be subject to concurrence of the SPMG. Any significant change impacting the objective of the DPR will need approval of NMCG.
5. The State Government of (Name of the State)/the ULB/Municipal Corporation of (Name of the City) shall bear any cost overrun over and above the total sanctioned cost of DPR as a whole.
6. The total cost of the Activity will not exceed Rupees XXXX lakh. During the administration of various contracts, under an approved DPR, the EA will be able to approve any contract variation in the order up to a cumulative ceiling of 5 per cent of the value of the contract subject to prior concurrence of the SPMG. For any variation in the order up to a cumulative ceiling of above 5 per cent but less than 15 per cent of the value of the contract shall be approved by the SPMG; and any cumulative variation of more than 15 per cent will require additional concurrence and approval of the World Bank {for World Bank financed investments only} under intimation to NMCG.
7. The SPMG will maintain a bank account (the “mother account”) for receiving and accounting the entire amount for the State Projects. Each EA will have a zero balance bank account (the “child account”) in the same bank. The EA will have the authority to issue online payment instructions to pay contractors/suppliers for undertaking activities within the scope of the approved Annual Action Plan. The SPMG Bank will then transfer required funds from the mother account to the child account of the EA, which will make payments to the suppliers’/contractors’

account. The EA for expenditure of itself, such as for all incremental operating cost, will open a dedicated bank account.

8. All payment, expenditure, accounting and auditing will be as per the Financial Management Manual of NGRBA/NMCG. The SPMG (and as required the EA, as far as incremental operating costs and direct expenditures by the EA are concerned) will maintain the cash book, the general ledger and the “payment order” issue registers, under double-entry procedure as relevant, in a manner prescribed by a charter of accounts by the NMCG so that the SPMG/EA accounting is in conformity with the computerized accounting system adopted by the NMCG for the NGRBA Program. The original bills and vouchers would be retained and filed separately by the EA to be audited as specified in the Financial Management Manual of NGRBA/NMCG.
9. Procurement of all works, goods and consultancy services under the Activity will be carried out in accordance with the Procurement Manual of NGRBA/NMCG. The EA will be fully responsible for the entire procurement cycle from bid document preparation and invitation to contract signing and contract management for:
 - i. Procurement for all works, goods, equipment, and consulting services,
 - ii. Procurement of other incremental operating resources, such as contract staff and vehicle rentals,
 - iii. Works to be carried out through force account, if any, and
 - iv. All works to be procured through community participation, through community-based organizations and self-help groups.
10. If required and agreed as per the DPR, the SPMG and/or the ULB will procure any associated small work (as defined in the Procurement Manual), goods, and equipment or consulting services. In addition, the following will be complied with:
 - i. The SPMG shall submit the Procurement Plan [PP] prepared by the EA to the NMCG for review and clearance. All procurement shall be limited to the PP; and the EA or the SPMG or the ULB shall procure items as per the PP.
 - ii. For all procurement to be undertaken by the SPMG or the ULB, the EA will ensure that the technical specifications and the bill of quantities, with due technical sanctions, are sent to the SPMG/ULB in a timely manner, as per the Procurement Plan for the Project. The EA will participate in the finalization of the bid document or request for proposal.
 - iii. For all procurement processes to be entirely managed by the EA, the EA will ensure timely procurement as per the PP and as per the Annual Action Plan. The first set of bid documents for each type of

such procurement will be shared by the EA with the SPMG; such that the SPMG is satisfied that all procurement is in conformity with the relevant State Government Rules and the Procurement Manual of NMCG and that the chances of mis-procurement is absolutely avoided.

- iv. Once the first set of bid documents are agreed by SPMG, the EA will use these as a basis for each type of procurement during the entire Project period.
- v. In the event of any difference between the applicable procurement rules of the State Government and that of the Procurement Manual of NGRBA/NMCG, the later will prevail.

PART-C

PARTIES signatory to this MoA hereby resolve to COMMIT as follows:

1. The State Government through District administration and the ULB/Municipal Corporation will ensure that all the necessary clearances from various departments, agencies and/or authorities are provided to the EA for successful and timely completion of NGRBA program.
2. The State Government through the District administration and the ULB/Municipal Corporation will undertake all necessary actions including land acquisition, if required, to ensure timely availability of land, free from all encumbrances, for the purpose of the NGRBA program to be availed to the EA, as per the implementation schedule.
3. The State Government and the ULB/Municipal Corporation will fulfill all the requirements, including all actions to ensure timely availability of encumbrance's free land for preparation, implementation and full O&M of the NGRBA program investments and all works and assets so created under the program.
4. The State Government and the ULB will implement the Resettlement Action Plan (RAP) for the Activity (approved as part of the DPR) in an effective and timely manner as described in the RAP.
5. The ULB/Municipal Corporation will undertake all the necessary actions to ensure timely completion of 100% connections (residential/ commercial/other establishments) with the sewerage networks, thereby ensuring the flow of all wastewater in the networked area so that it is intercepted and conveyed to the treatment systems. Such actions may require community mobilization, requisite changes in municipal bylaws, household-level separation of storm water and wastewater flows.
6. The ULB/Municipal Corporation will assume ownership of all works and assets completed and created under the NGRBA program within its jurisdiction.
7. The ULB/Municipal Corporation of (Name of the City) will put through the mechanisms for raising resources for O&M of assets and associated systems, as proposed in the O&M financing plan stated and agreed in the DPR.
8. The ULB/Municipal Corporation of (Name of the City) and the State Government of (Name of the State) will own functional responsibility, jointly and severally, of O&M of the created assets and associated systems to ensure its sustainable O&M in future years.
9. The SPMG along with EA will ensure that a proper record maintenance of project designs, as built drawings, technical specifications, and operation and maintenance manuals, both in soft and hard copies, in requisite numbers at the

archive/library of the Ganga Knowledge Centre (GKC), the NCMG and the ULB/Municipal Corporation to facilitate future references.

10. The SPMG will provide No Objection Certificate (NOC) on the Activity Completion Report submitted by the EA of the works for all investments after proper/adequate invigilation of standards/parameters and arrange for the protocol for the transfer of the same to the ULB/Municipal Corporation under intimation to the NMCG.
11. The SPMG will facilitate payments on schedules and do needful to observe the demonstration of performance guarantee parameters.
12. The SPMG and the EA will ensure all necessary measures to the safety and security of the works and workers during implementation and O&M of the NGRBA program.
13. The SPMG shall coordinate with the ULBs as well as other State Government Agencies to ensure synergy with other relevant national and state programs, such as JNNURM, UIDSSMT and NRCP.
14. The SPMG will regularly conduct independent and concurrent monitoring of the adequacy of EA's implementation arrangements and assess implementation performance of the Activity.
15. The Executing Agency commits to:
 - a) Prepare the Annual Action Plan for the Activity to be submitted to the SPMG at least three months before the start of the next financial year and on approval of such plan, the EA will take up the execution of Activity;
 - b) Prepare Feasibility Report (FR) as per the frameworks available for the specific works by NGRBA and, if required, on its approval will work out DPR as per agreed terms & conditions;
 - c) Take all the necessary actions for the proper and adequate implementation of investments, as per the guidelines and manuals of NMCG/NGRBA, towards creation and completion of works and assets under the project for the NGRBA program including inviting bids for work contract and entering into contract/s for execution of project work at the site, in consultation and cooperation with the SPMG, the ULB/Municipal Corporation and/or the District administration; once the DPR is agreed, approved and sanctioned, with necessary technical and other modifications, if any, as per NGRBA Guidelines;
 - d) Seek SPMG's approval for any procurement bid premium and would sign the contract only after such approval is arrived from SPMG;

- e) Cooperate for periodic site visits of NMCG/SPMG or of any person or agency authorized by them;
- f) Ensure the demonstration of performance guarantee parameters;
- g) Ensure strict adherence to time and works schedules, quality controls and assurances;
- h) Facilitate proper transfer of ownership of works completed and assets created;
- i) Arrange with the ULB/Municipal Corporation for proper O&M of such works and assets created under the NGRBA program;
- j) Consolidate physical progress reports, financial/expenditure reports and submit these reports along with the Utilization Certificates to the SPMG, in the prescribed formats, on a quarterly basis;
- k) Prepare O&M management plan for the assets including all works created under the NGRBA in agreement with the ULB. The EA shall ensure that a detailed operation and maintenance management plan including a detailed cost estimate for O&M is duly incorporated and described in the DPR;
- l) Prepare an update of this detailed operation and maintenance management plan in agreement of the ULB and submit to the SPMG before the construction or installation of the Activity is completed. For DBO this is done at the end of 15th year of O&M;
- m) Nominate, in addition to the Nodal Officer, a Team of full-time qualified staff for satisfactory completion of the Activity including staff required for contract management and to ensure high quality execution:
 - i. The EA will procure, in a timely manner, the necessary contract staff needed for financial management or accounting, and contract management;
 - ii. This will include provision of all necessary personnel for regular and continuous supervision of the Activity during construction. If the EA does not have spare in-house capacity, skill or personnel for regular and continuous supervision of the Activity during construction/installation, it may propose procurement of a requisite number of qualified consultants or contract staff to undertake such supervision, in agreement of the SPMG. The EA will ensure that all these facilities, resources and staff necessary to complete execution of the Activity are duly incorporated and described in the DPR.

- n) Prepare and finalize the technical specifications and bills of quantities for goods, equipment and works involved in the Activity as per the scope of work agreed; preparing and finalizing the terms of reference for procurement of any consultancy services or any contractual staff to be recruited; obtaining necessary approvals, as per the Government rules and procedures applicable to the EA on each of the items listed above; and forwarding in a timely manner the items to the SPMG for initiating and completing the procurement processes;
- o) Ensure that the SPMG is consulted in all stages of procurement of goods, works and consulting services. The EA shall ensure that there is no duplication or overlapping procurement in the [Name of Investment Activity];
- p) Assist in a timely manner the SPMG and the ULB for all procurement that will be undertaken by the SPMG or the ULB as per the DPR in support of the Activity. The EA will nominate up to 3 (three) representatives of the EA to be included in the Procurement Award Committee organized by SPMG or ULB for such associated procurement at the request of SPMG or the ULB;
- q) Undertake contract management and day to day supervision in such ways that the Activity is executed without any time overrun. Any change in cost estimate, budget and schedule of execution will be subject to prior concurrence by SPMG;
- r) Implement all actions and taking all measures to comply with the Environmental and Social Management Plan and the Grievance Redress procedure of the Project. These actions will be reported in each quarterly progress report. In addition, each quarterly progress report will certify that the issues defined to be avoided in the Environmental and Social Management Plan, as applicable for the Activity has not occurred or surfaced during execution of the Activity;
- s) Implement the specific portion of the Communication Plan of the Project, as applicable for the Activity. In addition, assist SPMG to implement any related or associated public communication and corrective actions;
- t) Bring to the notice of SPMG any grievance of any individual, community or stakeholders with respect to the plan, design or execution of the Activity within 15 days of noticing or recognizing any such grievance, including the description of actions already taken or proposed to be taken to address such grievance;
- u) Prepare, on completion of the Activity, a final Activity Completion Report and submitting it to SPMG. On review of the report, the SPMG in consultation with ULB will issue an NOC to enable transfer or handing over of the completed Activity to the ULB for O&M.

16. This Memorandum of Agreement shall terminate on the handing over/completion, as the case may be, of the Activity or if any one of the parties terminates it with mutual consent of the other parties. The SPMG in consultation with the ULB shall however have the right to terminate this Memorandum of Agreement and stop further funding at any stage if (i) the progress of execution of the Activity is found to be unsatisfactory, (ii) financial irregularities in the execution of the Activity have occurred, or (iii) a problem with the technical or social feasibility of the chosen sites has arisen, at any stage.
17. Recovery of the sunk cost will be made on EA, at the risk and the cost to EA, if this MoA terminates before final handing over/completion, as the case may be, of the Activity. In case of the termination of this MoA, the SPMG will estimate the cost of completion of remaining work, and shall take out the difference of the estimated cost of completion of remaining work with the balance money with SPMG for the Activity as per the DPR. The difference amount, so obtained, will be levied on the EA. In the event of dispute, the decision of the State Government will be binding on all the parties.
18. The SPMG, the ULB and the EA will amend this Memorandum of Agreement, only on concurrence of the NPMG.
19. In case of dispute between the parties, the issue will be resolved through mutual discussion. All the three parties will make best efforts to settle the dispute that may arise out of or in connection with any aspect of this Memorandum of Agreement through mutual and amicable consultation. However, if there is need to terminate this agreement or, if the dispute is not settled through such consultation, the decision of the [Principal Secretary, Department of Urban Development or the Chief Secretary], Government of [Name of State] will be final and binding in all settlements of disputes to all the Parties.
20. This Agreement, its meaning and interpretation and the relations among the parties shall be governed by the laws of the Union of India.

21.

In witness whereof, the parties hereto have caused this Memorandum of Agreement be signed in their respective names as below and shall be in effect from (the day, date) first above written:

SIGNATORIES

For the State Government of (Name of the State), the Secretary of the Nodal Department, Government of (Name of the State) who is also the Executive Chairperson of SPMG.

For the ULB/Municipal Corporation of (Name of the City), the Mayor/Chairman or the Municipal Commissioner or the Executive Officer of (Name of the City).

For the Executing Agency (Name and address of the EA), the Head/CEO/Chief Officer.

Witness I

Witness II

PROCUREMENT MANUAL

(For World Bank Assisted National Ganga River Basin Project)

CONTENTS

Sl.No.	Description	Page No.
1.	Introduction	203
2.	Project Details	204
3.	Procurement Arrangements in NGRBA Project	205
4.	Procurement Methods And Value Thresholds	209
5.	Procurement Methods for Goods and Works	212
6.	Procurement Methods for Consultancy Services	119
7.	Procurement Administration and Management Roles and Responsibilities	223
8.	General Issues – Post Review, Audit and Documentation	227
Annexes		
i.	Sample Procurement Plan	230
ii.	Flow Chart For Procurement Of Goods (NCB)	232
iii.	Flow Chart For Procurement Of Services	233

1. INTRODUCTION

1.1 The “**Procurement Manual**” provides the essential information and step by step procedures in brief, about procurement of goods & works and services to achieve the objectives of the program National Ganga River Project (NGRBA) supported by the World Bank.

1.2 Procurement of all goods, works and services under National Ganga River Basin Authority (NGRBA) project will be carried out in accordance with the World Bank’s “Guidelines: Procurement Under IBRD Loans and IDA Credits” dated January 2011 (Procurement Guidelines); and “Guidelines: Selection and Employment of Consultants by World Bank Borrowers” dated January 2011 (Consultancy Guidelines) and the agreed procedures described in the Legal Agreements.

1.3 This document is intended for procurement officers at NPMG, SPMG & PEAs to achieve the uniform system of procurement in all the States. This document is also intended to guide the implementation agencies to understand the procedures to be followed for procurement. The rights and obligations of the purchaser and the contractor of goods and works are governed by the tender documents and by the contracts signed by the purchaser with the contractor and not by these guidelines.

1.4 The Manual is organized in 2 parts, this first part deals with all details of the processes, methods and various value thresholds that shall be maintained. Part 2 of the NGRBA Procurement Manual includes various formats and documentation required for carrying out procurement activities under the World Bank assisted project. Model bidding documents, protocols for bid opening, comparative analysis, evaluation, etc. are included as part of Part 2 for the use of practitioners.

2. PROJECT DETAILS

2.1 The Ganga river basin is the largest in India, extending over the states of Uttarakhand, Uttar Pradesh, Bihar, West Bengal and Jharkhand. Whereas the river Ganga is of unique importance ascribed to reasons that are geographical, historical, socio-cultural and economic giving it the status of a national river. And whereas the river Ganga has been facing serious threat due to discharge of increasing quantities of sewage effluents, trade effluents and other pollutants on account of rapid urbanization and industrialization. And whereas the demand for the river water is growing for irrigation, drinking purposes, industrial use and power due to increase in population, urbanization, industrialization and growth in infrastructure, and taking into account the need to meet competing demands.

2.2 The Central Government by notification has set up the “National Ganga River Basin Authority”(NGRBA) as an empowered planning, financing, monitoring and co-ordinating authority for the Ganga River, in exercise of the powers conferred under the Environment (Protection)Act,1986. The Authority is to ensure effective abatement of pollution and conservation of the river Ganga by adopting a holistic approach with river basin as the unit of

Project Goals

2.3 The objectives of the NGRBA is to ensure effective abatement of pollution and conservation of the river Ganga by adopting a river basin approach for comprehensive planning and management. It has been decided that under the mission clean Ganga, it will be ensured that by 2020 no untreated municipal sewage or industrial effluents flows into the Ganga.

Scope of the Manual

2.4 Procurement Manual contains procedures to be followed for procurement of goods, works and consultancy services for implementation of NGBRA projects. The Manual is based on World Bank Guidelines and will be applicable for the PEAs/stakeholders in implementation of program me, namely ,NPMG, SPMG and all other implementing agencies. The Manual includes draft of invitation of Bids; briefs of contract data; pre-bid conference; procurement process, evaluation of bids for works and goods, award of contract review requirements by the Bank at appropriate stages.

2.5 Appropriate Standard Bidding Documents of the Bank as agreed by the World Bank (as amended from time to time) shall be followed for procurement of goods, works and services for individual sub-projects following methods and Procedures as per approved Procurement Plan, and for changes, if any, prior clearance of the Bank shall be required.

Modification to the Manual

2.6 The Manual shall be a reference tool for the project implementation by the Project Implementing Agency and related agencies. The guidelines and procedures for procurement of goods, works and services laid down in this manual can be modified by mutual agreement between MoEF and the World Bank.

3: PROCUREMENT ARRANGEMENTS IN NGRBA

Procurement Policy

3.1 The procurement policy of NGRBA is to ensure that resources needed to carry out the activity are procured with due attention to economy and efficiency (lower cost, best quality and timely availability); project funds are used to pay for resources needed; and all suppliers have an equal opportunity to compete and their selection is carried out through most transparent means.

3.2 Following key aspects of procurement process are generally common to all public sector procurement including those followed by the Government and donors:

Transparency, fairness and fraud prevention is important so that everyone will know that funds are being honestly spent and accounted for;

Equal opportunity ensures that the suppliers/sellers are provide with equal opportunity;

Economy and efficiency (value for money) means that goods and services will be purchased at a reasonable price. This also means that the procurement is planned and executed to get the best efficiency;

Effectiveness means that the goods and services will fulfill project objectives.

The ability of the supplier/seller to provide the goods and services has to be documented so that there is assurance that what is promised can be provided.

It is important to know and understand that the funds institutions receive are public money, and it only transforms into an activity when the money spent is **accounted for** appropriately.

Procurement Arrangements

3.3 The NPMG and SPMGs will be responsible for overall procurement planning, management, monitoring and quality assurance under the project. PEAs will be responsible for detailed procurement management functions like preparing and issuing tenders, opening and evaluation of the tenders, placing contracts, contract management, regular supervision, and authorization of payments. PEAs shall follow the methods and procedures detailed in this manual for carrying out procurement activities

Procurement Plan

3.4 Planning and adhering to procurement of various items in an orderly manner ensures an effective method of budget execution and expenditure management. Procurement by any project implementing entity at national, state and PEA level shall be undertaken in adherence to the following essential conditions.

- (a) Ensure that specific budget provision is available to meet expenditure in the financial year in which it is to be incurred.
- (b) Assess bulk requirement of goods, works and services for procurement at the beginning of the financial year and initiate action for procurement in accordance with the procedure applicable.

- (c) Procurement is made to the best advantage of the annual plan implementation after comparison of competitive prices.
- (d) Purchase of items are in economic lots keeping in view the annual requirements.

3.5 The procurement plan details should include:

- i. The particular contracts for the goods, works and/or services required to carry out the project during the financial year.
- ii. The proposed methods for procurement of such contracts with their estimated costs, procurement schedule in accordance with the procedures agreed in the financing agreement, and
- iii. The related review procedures.

3.6 NPMG and SPMG of each state shall prepare procurement plan and procurement activity schedule for the project life as part of the Annual State Perspective Planning process agreed for the project. Procurement plan is essentially planning of what procurement of goods and works is to be carried out and at what time during the year. Separate procurement plan shall be prepared for Consultancies, Goods and Works. Procurement plan shall include Goods /consultancies / works to be procured, their estimated value, method of procurement, review by the Bank, bid opening date/receipt of technical proposal date. Methods of procurement to be adopted as well as review of contracts by the World Bank will be decided based on the total value of a tender/IFB rather than on the value of each individual contract/ schedule/ lot/ slice within the tender.

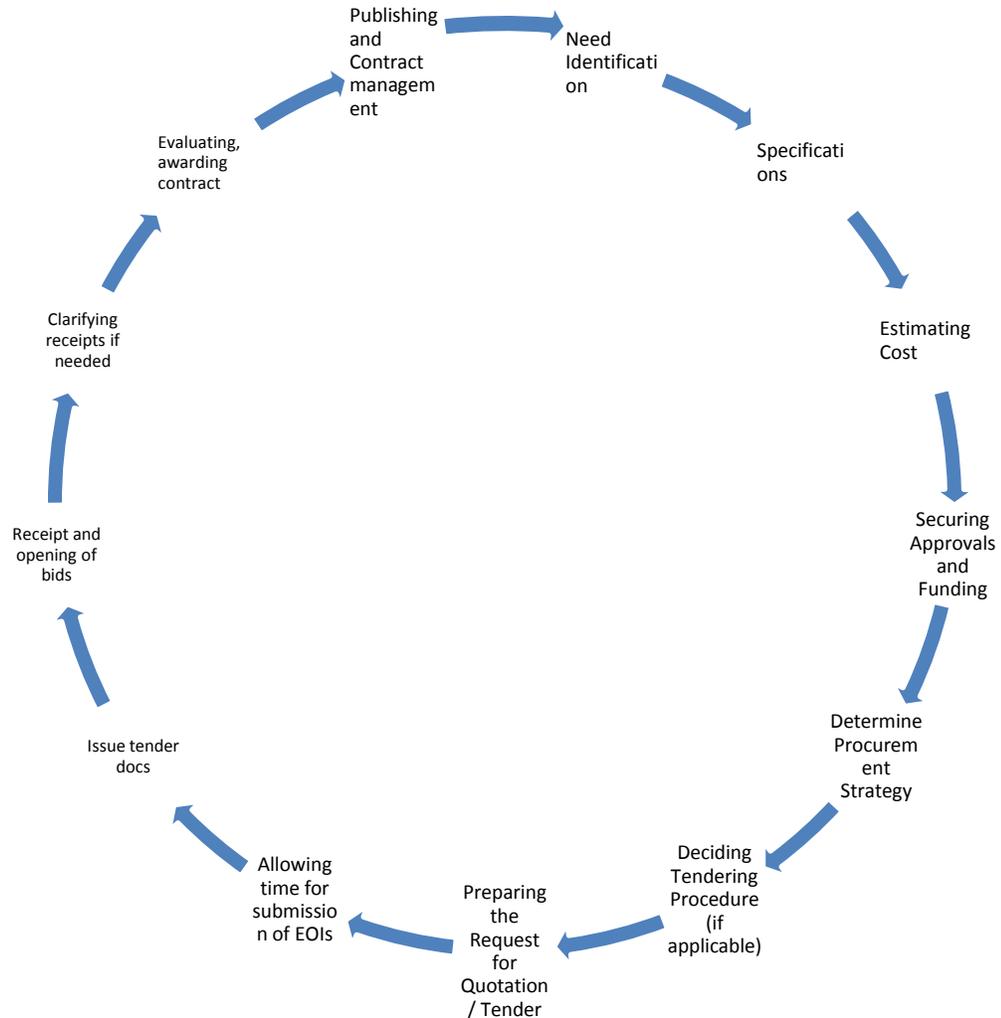
3.7 The Procurement Plan and Procurement Activity Schedule shall be submitted to the Bank for review and clearance. The procurement action will be initiated only after Bank's no-objection to Procurement Plan and Procurement Activity Schedule. The procurement plan shall be disclosed in the NPMG/SPMG website, notice boards and Bank's website.

3.8 The Project shall update the Procurement Plan annually or as needed throughout the duration of the project. The updated procurement plan shall be cleared with the Bank and published as at Para above.

3.9 All procurements in the project will be carried out as per the agreed procurement plan. The procurement plan at the States will be executed by SPMG. At the state level NPMG has no role in procurement except that all the prior review contracts will come to the Bank through NPMG. All procurement done outside the procurement plan will be ineligible for reimbursement from the Bank. Format for developing Procurement plan is attached as Annexure.

Procurement Procedures

3.10 Procurement procedure/guidelines are a set of steps in which purchase transaction is carried through the processes for identification of need , developing specifications, identifying suppliers/service providers, inviting offers/proposals, evaluating and awarding contracts, contract management, receipt and certification of goods/services, evaluation and closure. These steps integral parts of supply chain management together form the procurement processes of an organization. The flow chart given below captures these essential steps



4: PROCUREMENT METHODS AND VALUE THRESHOLDS

Threshold for Procurement Methods and prior review -

4.1 Thresholds give various value cut offs for using different methods. These thresholds are subject to periodic review and revision as needed during project implementation based on forthcoming actions and client capacity. If a bid transaction comprises contracts for several packages,(consisting of lots and/or slices); the aggregate estimated value of all contracts put to bid together will determine the applicable threshold amount and the corresponding method to be used. These thresholds shall be reviewed by the Bank periodically during the life of the project to bring in any changes as demanded by further risk assessments.

4.2 Methods and Value thresholds for Civil Works are:

Expenditure Category	Value* (Threshold per contract)	Procurement Method	Contracts subjected to Prior Review/Post Review
Civil Works including Works that involve supply and installation components for STPs.	(a) Civil Works estimated to cost equivalent to US\$ 100,000 or less per contract.	National Shopping	Post review only
		Force Account	Post review only
	(b) Civil Works estimated to cost more than the equivalent to US\$ 100,000 per contract and less than US\$ 20 Million.	National Competitive Bidding (NCB)	First two works contract by each institution under the project NCB regardless of value and all contracts above US\$ 5 Million equivalent each will be prior reviewed by the Bank. All other contracts by the post review.
	(b) Civil Works estimated to cost more than US\$ 20 Million	International Competitive Bidding (ICB)	All ICB contracts will be subject to

* If a transaction comprises several packages, lots or slices, the aggregate estimated value of contracts determines the applicable threshold amount.

Irrespective of the prior review thresholds, first NCB contract for goods and works from all procurement entities will be subjected to prior review by Bank.

@ Under Works category, NCB method limit of up to \$20 Million to be used for STPs under Component 2 of the project, for items/packages identified in prior approved procurement plans. Irrespective of this upper limit, the decision to proceed on NCB or ICB terms above the value of \$10 Million will be based on: (i) a capacity assessment of the local contracting industry and ability of potential bidders to respond to the tender requirements; and (ii) the scope for reduction of the geographical dispersion of the contracts (whenever possible) through a careful packaging strategy to be applied during the feasibility DPR stage and while finalizing the annual plans and procurement plans.

4.3 Methods and Value thresholds for Goods are:

Goods			
Equipment, Machinery, Vehicles, Furnitures, Learning Materials etc.	(i) US\$ 50,000 equivalent or less per contract	National Shopping (DGS&D rate contracts are treated at par with Shopping However, State Rate Contracts cannot be used at par with Shopping. If state rate contract exists for an item, the same can be considered as one of the 3 quotations to be sought under shopping procedures	Post review only
	(ii) Proprietary equipment; software; print, audio or visual educational publications; and other learning resources irrespective of value	Direct Contracting	Prior review with justifications as per Guidelines
	(iii) Contracts of more than US\$ 50,000 equivalent but less than US\$ 1 Million equivalent.	National Competitive Bidding (NCB)	First bidding document and first contract of all PEAs, SPMGs and NPMG will be subject by Prior review by the Bank
	(iv) Contracts of more than US\$ 1 Million equivalent	International Competitive Bidding	all ICB contracts are subject to Prior review by the Bank

* If a transaction comprises several packages, lots or slices, the aggregate estimated value of contracts determines the applicable threshold amount.

4.3 Methods and Value thresholds for Consultancy Services are:

<p>Consultancy Services (Firms)</p>	<p>(a) More than US\$200,000 equivalent per contract.</p>	<p>Quality and Cost Based Selection (QCBS)</p> <p>Quality Based Selection (QBS)</p> <p>Would comprise entirely of national consultants for all contracts below US\$500,000</p>	<p>Prior Review.</p> <p>All contracts valued above \$ 200,000.</p> <p>All others post review</p>
	<p>(b) More than US\$100,000 and up to US\$200,000 equivalent</p>	<p>Quality and Cost Based Selection (QCBS)</p> <p>Or</p> <p>Selection based on a Fixed Budget (FBS)</p> <p>Or</p> <p>Selection Based on Least Cost Basis (LBS)</p>	
	<p>(c) US\$100,000 equivalent or less per contract.</p>	<p>Selection Based on Least Cost Basis (LBS)</p> <p>Or</p> <p>Selection based on Consultant's Qualification (CQ)</p> <p>Or</p> <p>Selection based on a Fixed Budget (SFB)</p>	
<p>Individual Consultants</p>		<p>Competitive Selection based on review of 3 shortlisted resumes</p>	<p>Prior Review of all contracts valued above \$50,000. All others post review</p>

* If a transaction comprises several packages, lots or slices, the aggregate estimated value of contracts determines the applicable threshold amount.

4.4 Review by the Bank of Procurement Decisions

In case of variations in the contract amounts the following procedures as provided by the World Bank Procurement Guidelines should be followed:

Civil Works.

–All contracts of civil works above 18 months provide for Price variation factor i.e. possibility of increase in the contract amount due to price increases in certain inputs like Steel , cement etc. As mentioned in the contract. If contract amount increases during implementation due to price variation factor, for prior review contracts the variation order needs to be approved by the Bank if the overall change is more than 15% (cumulative increment to be considered for this purpose)of the original contract amount.

For post review contracts if after variation the total value of the contract crosses the threshold of post review, then variation order has to come to Bank for no objection. Here also cumulative increment in the contract value needs to be considered for this purpose.

In prior review cases, in case of any variation above 15% of the original contract amount (cumulative increment to be considered for this purpose) the variation order needs to be approved by the Bank.

Goods.

After the contract is signed there should be no variation. If there is any exception the Bank should be approached for a no-objection with a justification.

Consultancies:

For Lump-sum contracts generally variations are not allowed. For exceptional cases Bank should be approached for a no-objection with a justification.

Time based contracts:

As the payments are linked to inputs (for e.g. in case of supervision tasks) variations in the contract amount due to extension in time is possible. But if it is a prior review contract it should be sent to the Bank for no objection. If it is a post review contract, it should come to the Bank if the contract value crosses the prior review threshold (cumulative) as a result of such extension.

The above-mentioned norms are detailed in the World Bank Procurement Guidelines which should be referred to and complied with.

Payments should be made to contractors/consultants/suppliers within the time limit stipulated in the contract documents. All contract documents should lay down such timelines for payment of acceptable invoices. If the invoice is not acceptable, the reasons of non-acceptance should be communicated to the contractor/supplier/consultant within two weeks of the receipt of the invoices. Contract documents should also lay down norms for penalties for non-payment within the prescribed timeline as well as penalties for failure of delivery of goods/ works of agreed standards within prescribed timeline.

5: PROCUREMENT METHODS FOR GOODS AND WORKS

5.1 The methods of procurement to be followed for Goods and Civil Works are:

International Competitive Bidding (ICB)

National Competitive Bidding (NCB)

National Shopping

Direct Contracting

Force Account (for civil Works through Public Works Department)

5.2 INTERNATIONAL COMPETITIVE BIDDING (ICB)

5.2.1 This method is generally adopted where supplies cannot be met from indigenous sources and need import; and / or foreign firms are expected to participate (irrespective of the value) and bring more competition. For details of procedures under IBRD Loans and IDA Credits, January 2011 (Guidelines). Standard Bidding Document of the World Bank will be used for contracting under ICB Procedures.

5.3 NATIONAL COMPETITIVE BIDDING (NCB)

5.3.1 NCB also known as Open Tender is the competitive bidding procedure normally used for public procurement of goods and civil works in the country. The procedures shall provide for adequate competition in order to ensure reasonable prices. The criteria to be used in the evaluation of tenders and the award of contracts shall be made known to all bidders and not be applied arbitrarily. Framework Contracts can be used for commonly procured items up to the cumulative value of NCB threshold. NCB will be conducted in accordance with the World Bank Procurement Guidelines and the following provisions:

- Only the model bidding documents for NCB agreed with the GOI Task Force (and as amended for time to time), shall be used for bidding;
- Invitations to bid shall be advertised in at least one widely circulated national daily newspaper or in the official gazette, or on a widely used website or electronic portal with free national and international access, in English, at least 30 days prior to the deadline for the submission of bids;
- No special preferences will be accorded to any bidder either for price or for other terms and conditions when competing with foreign bidders, state owned enterprises, small scale enterprises or enterprises from any given state;
- Extension of validity shall not be allowed without the prior concurrence of the World Bank (i) for the first request for extension if it is longer than four weeks; and (ii) for all subsequent requests for extension irrespective of the period (such concurrence will be considered by the Bank only in case of Force Majeure and circumstances beyond the control of the Purchaser/Employer).
- Re-bidding shall not be carried out without the prior concurrence of the World Bank. The system of rejecting bids outside a pre-determined margin or “bracket” of prices shall not be used in the project;

- Rate contracts entered into by Directorate General of Supplies and Disposals will not be acceptable as a substitute for NCB procedures;
- Two or three envelope system will not be used;
- No negotiations are conducted even with the lowest evaluated responsive bidders.

5.4 SHOPPING

5.4.1 Shopping procedure is adopted where the estimated cost of procurement is less than \$100,000 for civil works and less than \$50,000 for goods. The following consideration should be kept in view for adopting this procedure:

General: Shopping is a Procurement method based on comparing price quotations obtained from several national suppliers, usually at least three to ensure competitive prices. Shopping should not be used as an expedient to by-pass more competitive methods or fraction large procurement into smaller ones solely to allow the use of Shopping.

To be used: To procure small amounts of off-the-Shelf goods or Standard. Specification Commodities or simple civil works for which more competitive methods are not justified on the basis of cost or efficiency;

Requirements:

- * Request for quotation shall be written and sent by letter, fax, telex, etc. (with proof of receipt and record keeping);
- * The request shall include the description and quantity of the goods as well as the required delivery time and place for the goods or services, including any installation requirements as appropriate;
- * The request shall indicate the date by which the quotations are needed.
- * Prices for goods supplied from within the country (including previously imported items) are requested to be quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom or off-the-shelf, as applicable) including all custom and excise duties and sale and other taxes already paid or payable on the raw materials and components; for goods offered from abroad (i.e., not previously imported) prices are requested CIF or CIP or DDU basis (in case of large purchases).
- * In case of civil works prices shall be requested inclusive of all taxes and duties payable by the contractor.
- * Requests should be addressed to more than three firms that are reputable, well established and are suppliers of the goods or services being purchased, as part of their normal business (after verifying whether those being invited will make an offer or not) to ensure at least three quotations are received; In case

unsolicited quotations are received, they may be accepted after carrying out a similar due diligence exercise to verify the nature and reputation of firm.

* Quotation should be submitted in writing i.e., by fax, telex, or letter (copies to be kept for records).

* No bid or performance securities are required.

* Normally, requests for quotes should indicate the expected date of submission of quotes with a minimum of 7 days for goods and 14 days from the date of issue of request.

* If the Purchaser has not received at least three quotations within the time set, it should verify with the suppliers who have not submitted quotation, whether they intend to do so and how soon. Unless there is extreme urgency or there are already three or more quotations available, reasonable amount of additional time, say three more days, could be given to submit quotation.

* Quotation should be compared after adding to the quoted price for goods, the estimated cost of inland transportation and insurance, if any, to the final destination. The lowest priced offer is selected.

* Purchaser may exercise discretion in selecting a quotation that is not the lowest priced as far as there is good technical justification on the quality of the offered item, suitability of delivery schedule, etc. In such cases, such requirements should be indicated in the request for quote as well as in the evaluation note.

* Award decision and its rationale should be documented/ and kept for review by audit by the Bank (or by the Bank's auditors) as needed. The record should contain the list of firms invited, and the list and value of quotations received, comparative statements etc. The documents should clearly show that the award is based on sound technical and commercial criteria.

* Purchase order shall incorporate the terms of accepted offer and should specify the currency of payment (which is the currency of the quote).

5.5 Direct Contracting

5.5.1 The procedure for Direct Contracting may be adopted if any one of the following conditions is met. The value of each contract for such procurement should not exceed the limited prescribed in the table given in para 1.2 above.

(a) The Single Tender system may be adopted in case of articles including equipment, which are specifically certified as of proprietary in nature, or where only a particular firm is the manufacturer of the articles demanded or in case of extreme emergency.

(b) The single tender system without competition shall be an appropriate method under the following circumstances:

- Extension of existing contracts for works or goods awarded with the prescribed procedures, justifiable on economic grounds;
- Standardization of equipment or spare parts to be compatible with existing equipment may justify additional purchases from the original supplier;
- The required item is proprietary and obtainable only from one source, and
- Works are small and scattered or are situated in remote locations where mobilization costs for contractors would be unreasonably high.

5.6 Procurement of Civil Works through Force Account

5.6.1 Force account, that is, construction by the use of the Implementing Entity own personnel and equipment may be the only practical method for constructing some kinds of works especially when works are small and scattered or in remote locations for which qualified construction firms are unlikely to bid at reasonable prices. Prior approval of the same from bank is required, if the agreed Procurement Plan does not provide for this method. In general, under this project, the maximum limit for works executed through force account shall not exceed the shopping threshold.

5.7 Preparation of Tender Document

5.7.1 Standard bidding documents agreed with Government of India Task Force should be used for NCB. Sale of tender documents should begin only after the publication of notification for tender in newspapers. The tender documents shall furnish all information necessary for a prospective bidder to prepare a tender for the goods and/ or works to be provided. Tender documents should be made available to all who seek them after paying the requisite fees, if any, regardless of registration status and they should be allowed to bid. However, the request should be in writing along with the requisite fee of the tender/bid, if any.

5.7.2 The Bid document should invariably contain standard bidding and contract conditions to make it self-explanatory. Some of the mandatory requirements in a bid document include- Invitation for bids, Instructions to Bidders, Contract data including Bill / Schedule of Quantities (BOQ), General terms & conditions, Award criteria, Notification of award, Execution of contract, Quality control, Payment terms, Taxes and duties, Completion certificate, Warranty/ Defect liability, Drawings, Dispute resolution, Arbitration, Force Majeure, etc. Bill/ Schedule of quantities (BOQ) will indicate the description of items to be provided along with quantities and the phased manner in which the goods/works are required to be delivered or constructed.

5.7.3 Various formats to be used for advertisement and inviting bids and proposals are given in Part 2 of the manual

5.8 Various aspects, conditions and processes involved are detailed in the documents referred to above in Annexes. In the section below, some of the important aspects to be kept in view while undertaking procurement activities using this documentation are elaborated:

Aspect	Things to Remember
Advertisement	<ol style="list-style-type: none"> 1. In case of ICBs, also publish in the World Bank's external web site and forwarded to embassies and trade representatives of countries of likely suppliers of goods and also who have expressed interest in response to the General Procurement Notice (GPN). 2. In case of NCB, Invitations shall be published in at least in one national daily or in the official gazette, or on a widely used website or electronic portal with free national and international access 3. The advertisement should also be placed at the project website. 4. No need for advertisement in case of National Shopping.
Time for submission of Bids	<ol style="list-style-type: none"> 1. Not less than 2 weeks for Shopping. 2. Not less than 4 weeks for NCB. 3. Not less than 6 to 8 weeks for ICB.
Bid Opening	<ol style="list-style-type: none"> 1. Bid Opening shall be on the same day, immediately after closing submission of bids. 2. All bids shall be opened publicly in the presence of representatives of bidders. 3. Only single venue for submission and opening of Bids. 4. Late Bids to be returned unopened. 5. The name of the bidder and total amount of each bid along with important conditions like excise duty, sales tax, delivery terms, delivery period, special conditions and discounts, if any, shall be read out at the time of bid opening. Withdrawal notices and modifications to the tender shall be read out first followed by the tender of the bidder. 6. On the spot Comparative statement should be prepared and signed by all present.
Bid validity	<ol style="list-style-type: none"> 1. Generally 30 to 45 days for Shopping. 2. Generally 90 to 120 days for NCB/ICB.
Non responsive Bids which will be rejected	<ol style="list-style-type: none"> 1. Unsigned bids. 2. Not accompanying Bid Security as per value and valid duration in days, if required as per bid documents. 3. Not meeting eligibility criteria, if any mentioned in the bid documents. 4. Bids that have not quoted for the entire schedule/packing (if so required by Bid documents) and are not in the required currency as indicated in the bid documents. 5. Not meeting the technical and financial capability as per specified tender evaluation criteria to successfully execute the contract.
No Negotiations	There should not be any negotiations either for price or terms and conditions of the tender submitted.
Securities and Penalties in Bid Documents and Contracts	<ol style="list-style-type: none"> 1. Performance Security is generally taken in NCBs and ICBs. 2. Retention Money is generally taken in civil works contracts. 3. Liquidated Damages should be included in all contracts. <p>All the above should be included in Bid documents.</p>
Repeat Orders applicable for ICBs and NCBs	<ol style="list-style-type: none"> 1. Quantities in contracts awarded may be increased as per the prevailing State procedure up to 15% of the quantity originally ordered by repeat orders. 2. No Objection needed from Bank for more than 15%.

Fraud and Corruption	<ol style="list-style-type: none"> 1. World Bank has the right to reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question. 2. World Bank will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive or coercive practices during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to remedy the situation. 3. World Bank will sanction a firm or individual, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at any time determines that they have, directly or through an agent, engaged, in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a Bank-financed contract. 4. Will have the right to require that a provision be included in Bidding Documents and in contracts financed by a Bank loan, requiring Bidders, Suppliers, Contractors and Consultants to permit the Bank to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Bank. (Please refer to World Bank Guidelines for detailed clause)
Procurement Review	<p>World Bank will carry out prior review of bid documents, advertisements, evaluation reports and award recommendations as per the value thresholds mentioned in Chapter 2. However, Terms of Reference and Consultants contracts for assignments of critical nature will be reviewed in all cases, regardless of values</p> <ol style="list-style-type: none"> 1. World Bank will carry out post review either by themselves or by Consultants of selected at least 10% of all contracts issued by all entities SPMU/DPMU/POs. 2. If the World Bank determines that the goods, work or services were not procured in accordance with the agreed procedures, as reflected in the Loan Agreement and further detailed in the Procurement Plan approved by the Bank or that the contract itself is not consistent with such procedures, it may declare misprocurement as established in the procurement guidelines.
Filing and Record Keeping	<ol style="list-style-type: none"> 1. Should follow the established Government procedures for filing of records. 2. Should keep all information in one single file per contract issued like copy of procurement plan with details of the item procured, bidding details like letters sent, advertisements issued, record of public opening of bids, all signed original bids with signatures of members opening the bid, bid evaluation report, minutes of meeting of Procurement committee, letter of indent, signed Purchase Order/Contract, Delivery challan/receipt, Inspection/Acceptance report, Invoice, Payment details, etc. 3. Maintain a purchase order log which is a brief record for all purchase orders issued containing supplier's name, brief description of purchase, total value of order, status of PO (open/ closed etc.) 4. Vendor Record file which contains the names, addresses of suppliers, materials that a vendor can supply, delivery and quality records 5. Rate contract file containing the purchase records of items under a term contract 6. Summary purchase reports (could be monthly/ quarterly/ half yearly/ annually) available to management for ease of reference. Could have the total value of purchase, allocation of purchase value against major items, budget for purchase for next year, proposal for revision of budget in current year.
Misprocurement	<p>The Bank does not finance expenditures for goods, works and consultancy services, which have not been procured/ contracted in accordance with the agreed provisions of the financing agreement and as further elaborated in Procurement Plan agreed with the Bank.</p>

	<p>In such cases, the Bank will declare misprocurement, and it is the policy of the Bank to cancel that portion of credit/ loan allocated to the goods, works, and consultancy services that have been misprocured. The Bank may, in addition, exercise other remedies provided for under the Financing Agreement. Even when the contract is awarded after obtaining “no objection” from the Bank, the Bank may still declare misprocurement, if it concludes that the “no objection” was issued on the basis of incomplete, inaccurate, or misleading information furnished by the Borrower or the terms and conditions of the contract had been modified without Bank’s prior approval.</p>
<p>Complaint Redressal</p>	<p>In order to deal with the complaints from the contractors / suppliers and public effectively, a complaint handling mechanism shall be set up at the State level as well as at district level, and immediate action shall be initiated on receipt of complaints to redress the grievances. All complaints shall be handled at a level higher than that of the level at which the procurement process is being undertaken and the allegation made in the complaints should be thoroughly enquired into, and if find correct, appropriate remedial measures shall be taken by the appropriate authorities. A register of the complaint redressal shall be prepared at each level and shall contain the following information</p> <ul style="list-style-type: none"> ○ S.No of the complaints ○ Date on which the complaint was made ○ Particular of the person making the complaint ○ Nature of the complaint ○ Complaint against whom if against a person ○ Detail of action taken and subsequent follow ups specifying on which date the action was taken ○ Whether the complaint has been satisfied if not why. ○ Action taken against the guilty ○ General remarks <p>Subsequently an on line data base will be created which will be regularly updated and which would be capable of creating on line reports for the purpose of the monitoring. SPMU will announce on its web site about having in place a complaint redressal mechanism</p> <p>In case any individual officer/staff is found responsible, suitable disciplinary proceedings shall be initiated against such officer/staff .This register shall also be subject to concurrent audit by the chartered accountants engaged as concurrent auditors.</p>

6: PROCUREMENT OF SERVICES

6.1 Definition of services includes training, workshops, IEC activities (printing or distributing material through an agency), research and studies, hiring of procurement agents, hiring of consultants, NGO services, PPP agreements and other similar contracting. General considerations will be:

- High-quality services;
- Economy and efficiency;
- Give qualified consultants an opportunity to compete
- Encouraging the development and use of national consultants
- The importance on transparency in the selection process

6.2 In all service requirements there are some key processes that need to be followed.

(a) Preparation of the Terms of Reference (TOR): A well-defined ToR should be prepared specifying the services to be provided on following lines: (i) Background information, (ii) A precise Statement of objectives, (iii) An outline of the tasks to be carried out, (iv) A time schedule for completion of tasks, (v) The support / inputs provided by the Client, (vi) Composition of Review Committee to monitor consultants work (vii) List of key personnel whose CV and experience would be evaluated.

(b) Preparation of cost estimate and budget based on the implementing agencies assessment of the resources needed to carry out the assignment, staff time, logistical support, and physical inputs. Costs shall be divided into three broad categories, (i) fee or remuneration, (ii) reimbursable, and (iii) miscellaneous expenses.

(c) Deciding the contracting strategy viz. going for lump-sum or time based contract⁹, individual vs. firm, advertising vs. internal short listing, terms of payment etc. Depending on the decision made, one of the selection methods mentioned above will be chosen.

(d) Advertising i.e. seeking Expression of Interest to be published in newspapers having wide circulation.

⁹ **Lump Sum**- These contracts are used for assignments like Feasibility Studies, Environmental Studies, Detailed design of a standard structure etc., in which the content and the duration of the work is clearly defined. Payment is made upon delivery of outputs.

Time Based - these contracts are used for assignments in which it is difficult to define the scope and the duration of the work to be performed. Payment is based upon an hourly, daily, or monthly rate, plus reimbursable expenses using actual expenses or agreed-upon unit prices. This type of contract provides for a maximum total payable amount that includes a contingency for unforeseen work and duration, price adjustments etc. Examples of Time Based contracts include Preparation of data, Complex Studies, Supervision of construction of civil works, Training assignments, Advisory services etc.

(e) Short listing of consultants i.e. the expressions of interest received shall be evaluated based on the relevant qualifications and experience specified in the advertisement, to arrive at shortlist of the consultants. The shortlists shall comprise six firms so that at the proposal stage, there is adequate competition among the Consultants.

(f) Seeking Request for Proposals (RFP): Proposals from the short listed firms/institutions will be sought in two envelope system i.e, technical proposal in one envelope and financial proposal in another envelope. Standard RFP document of the World Bank will be followed for this purpose.

(g) Evaluation: Evaluation committees separately for technical and financial evaluation shall be formed and this committee will evaluate the proposals received from the firms/institutions. The evaluation of the proposals shall be carried out in two stages: first the quality, and then the cost. Evaluators of technical proposals shall not have access to the financial proposals until the technical evaluation is concluded. *Combined Evaluation:* The combined evaluation of successful bids would be done by assigning 75% weight to the technical score and 25% to the financial (application of weight for commercial offer will depend on the method used). The consultant scoring the highest marks will be recommended by the committee for award of work and invited for negotiations.

(i) Negotiations and Award: It may be necessary to conduct negotiations with the selected consultant on the TOR, the methodology, staffing, Department's inputs, and special conditions of the contract. The firm obtaining the highest total score should be invited for negotiations and discussions. These discussions shall not substantially alter the original TOR or the terms of the contract, lest the quality of the final product, its cost, and the relevance of the initial evaluation be affected. In methods where price is a factor of the selection, no negotiations can be held on prices. Based on the final negotiated ToR and contract, an award is made to the selected agency.

(j) Rejection of All proposals, and Re-invitation: The procedure prescribed for the procurement goods and works is equally applicable for service contract also.

6.3 A detailed process flow depicting a selection process following QCBS for a service is presented in Annex ----.

6.4 Quality and Cost Based Selection (QCBS) is the method based on the quality of the proposals and cost of services to be provided. This method is appropriate when the scope of work assignment is precisely defined and the TOR are well specified and clear; and an estimate with reasonable precision for the staff time as well as the other inputs and cost required of the Consultants can be assessed.

6.5 Least Cost Selection (LCS) Under LCS a minimum qualifying mark for quality is established and indicated in the RFP, short-listed consultants have to submit their proposals in two envelopes. The technical proposals are opened first and evaluated.

Proposals scoring less than minimum qualifying marks are rejected, and the financial envelopes of the rest are opened in public. The consultant with the lowest evaluated price is selected. The LCS method is more appropriate for small assignments of a standard or routine nature where well established practices and standards exist from which a specific and well defined outcome is expected, which can be executed at different costs, eg. standard accounting audits, engineering designs and/ or supervision of simple projects; repetitive operations and maintenance work and routine inspection, and simple surveys.

6.6 Fixed Budget Selection (FBS) is based on disclosing the available budget to the invited consultants in RFP and selecting the consultant with the highest – ranking technical proposal within the budget. It needs to be ensured that budget is compatible with the TOR and that consultant will be able to perform the tasks within the budget. FBS is appropriate only when: (a) the budget is fixed and cannot be exceeded; (b) the TOR are simple and assignment can be precisely defined; and (c) the time and staff month effort required from the Consultant can be assessed with precision. Typical assignments awarded under FBS are: sector studies, market studies, and surveys of limited scope; simple pre-feasibility studies and review of existing feasibility studies; and review of existing technical design and bidding documents

6.7 Selection Based on Consultant’s Qualification (CQ) method applies to very small assignments for which the full –fledged selection process would not be justified. CQ is considered for assignments such as: brief evaluation studies at critical decision points of projects; executive assessment of strategic plans; high level, short term, legal –expertise; and participation in project review expert panel. Under CQ the Clients first prepare the TOR, then requests for Expression of Interest and qualification information on the consultant’s experience and competence relevant to the assignment. The Client establishes a short list and selects the firm with the best qualifications and references. The selected firm is asked to submit a combined technical and financial proposal and is then invited to negotiate the contract if the technical proposal proves acceptable.

6.8 Single Source Selection (SSS) involves asking a specific consultant to prepare technical and financial proposals, which are then negotiated. Since there is no competition, this method is acceptable only in exceptional cases and made on the basis of strong and convincing justification where it offers clear advantages over the competition. Some circumstances can be:

- The assignment represents a natural or direct continuation of a previous one awarded competitively, and performance of the incumbent consultant has been satisfactory.
- A quick selection of consultant is essential to address an emergency operation and crisis;
- Only one consulting organization has the qualification or experience of exceptional worth to carry out the assignment

6.9 Selection of Individual Consultant: For hiring of individuals, it is necessary to finalise the job description, qualification and experience required and terms of engagement. Thereafter an advertisement (if the assignment is complex) may be put into the newspapers indicating the above details. The applications received shall be scrutinized and ranking shall be prepared. Thereafter the top-ranked individual shall be

invited for interviews/discussions and would be offered the assignment. Consultants shall be selected through comparison of qualifications of at least three candidates among those who have expressed interest in the assignment or have been approached directly by the Client.

6.10 A comparison of the various steps across the above methods is presented below

Consultant Selection Process under Various Methods- A Comparison

Aspect	QCBS	FBS	LCS	QBS	CQS	SSS
Prepare ToR	↪	↪	↪	↪	↪	↪
Prepare Cost Estimate	↪	↪	↪	↪	↪	↪
Advertise for EOIs (2 weeks)	↪	↪	↪	↪	↪	✗
Prepare Shortlist of top 6 firms	↪	↪	↪	↪	Best firm shortlisted	✗
Prepare and Issue RFP to 6 firms (4 weeks)	↪	↪	↪	↪	Issued to 1 firm	Issued to SS
Technical evaluation and rejection below pass mark	↪	↪	↪	↪	✗	✗
Commercial Evaluation and combined scores	↪	T1 if within budget	L1 of tech qualified selected	✗	✗	✗
Cost & Units Negotiated for Award	✗	✗	✗	↪	↪	↪

7: PROCUREMENT ADMINISTRATION AND MANAGEMENT - ROLES AND RESPONSIBILITIES

7.1 This section describes the administrative and managerial tasks involved in conducting procurement related activities by the project management at NPMG, SPMG, PEAs and other institutions.

7.2 The functions and required powers of NGRBA /PMG and state level executives/SPMG in areas of Procurement and Contract Management are as follows:

Functional Area	NGRBA Executive /NPMG		SRCA Executive/SPMG	
	Functions	Powers	Functions	Powers
Procurement	*Enter contracts with selected & eligible agencies to deliver works, goods and services.	*Full powers to pre-qualify and post qualify contractors, suppliers and consultants, subject to agreed caps. *Power to delegate procurement to PEAs (on case to case basis, depending on PEA capacity) and SRCA	*Enter contracts with selected and eligible agencies to deliver works, goods and services.	*Full powers to prequalify and post qualify contractors, suppliers and consultants ,subject to agreed caps. *Power to delegate procurement to PEAs(on case to case basis, depending on PEA

		<p>Executive/NPMG.</p> <p>*Powers to ensure that technical sanction provided before bids from bidders are invited are not questioned by PEAs(or their line management).</p> <p>*Quality Assurance of prior review contracts from PEAs and SPMG's before the same is submitted to World Bank</p>		<p>capacity)</p> <p>*Powers to ensure that technical sanction provided before bids from bidders are invited are not questioned by PEAs(or their line management).</p> <p>*Quality Assurance of prior review contracts from PEAs before the same is submitted to World Bank</p>
Contract Management	*Ensure that the contracts entered with selected agencies are enforced and completed	<p>*Powers to make recommendation for payment, make payment, deduct or retain parts of the payment-and as relevant delegate such powers to PEA.</p> <p>*Powers to direct SRCA</p>	*Ensure that the contracts entered with selected agencies are enforced and completed in time and at cost.	<p>*Powers to make recommendation for payment, make payment, deduct or retain parts of the payment-and as relevant delegate such powers to PEA.</p> <p>*Powers to direct SRCA executive</p>

	<p>in time and at cost.</p>	<p>Executive/NPMG and/or PEAs to withhold payment in case of unsatisfactory progress of contracts. *Power to encase security deposits in favor of NGRBA Executive/NPMG. *Powers to approve variation order upto 15% of the original value and approve contingencies upto 5%. *Powers to inspect contracts owned by PEAs ,and powers to direct on corrective measures.</p>		<p>SPMG and/or PEAs to withhold payment in case of unsatisfactory progress of contracts. *Powers to encase security deposits in favor of SRCA Executive/SPMG, and apportion with NGRBA Executive/SPMG. *Powers to approve variation order up to 15%,and approve contingencies up to 5%. 8Powers to inspect contracts owned by PEAs, and power to direct on corrective measures.</p>
--	-------------------------------------	--	--	--

7.3 The NPMG and SPMGs will be responsible for all procurement, ensuring prudent financial management, quality assurance, monitoring and evaluations under the project. The NPMG and SPMGs will collaborate with a range of government departments or specialized agencies (the PEAs) that have jurisdiction, demonstrated capacity and expertise in management and execution of the proposed pilot investments. PEAs will be delegated with responsibility to procure and manage contracts within the delegated financial limits decided on a case by case basis by respective SPMG and as per agreed prior and post review arrangements with the Bank, regular supervision, contract payments and accounting. In case of contracts that require prior review by the Bank, PEAs shall submit their documentation to the respective SPMG for review and forwarding to the Procurement Unit of the NPMG. All submissions for prior review to the Bank shall be made only after review and acceptance by the NPMG. The sharing of roles and responsibilities, including administrative and fiduciary arrangements between the NPMG/SPMGs and the PEAs has been agreed and documented in bilateral MOUs.

7.4 The NPMG/SPMGs will collaborate with and seek support from and partnership with a range of other agencies to strengthen the capacity of the main implementing agencies. These will include international, national and local knowledge centers; academic and research institutes; private sector business houses and industries; urban and rural local government bodies; civil society groups, NGOs, community based organizations and other government departments responsible for coastal zone development and protection.

7.5 To be able to efficiently implement the above-mentioned responsibilities, adequate provision of staff, capacity and resources has been made within the NPMG and SPMGs.

8: GENERAL ISSUES - POST REVIEW, AUDIT AND DOCUMENTATION

8.1 **Procurement review** refers to auditing of files and documents relating to the procurement of Goods, works and consultancy services. Procurement review is basically carried out to ascertain whether the procurement procedures were correctly and completely followed, both in letter and spirit. It brings out omissions/commissions and lapses, whether on account of poor or inadequate understanding of the procedures or willful negligence including likely fraud/corruption evidence during the review. All documents related to procurement should be filed and kept systematically and safely. The report and observation of procurement review serve as a guide for taking remedial measures to streamline and improve the procurement system. The procurement review covers the following aspects:-

- a Whether the procurement plan was prepared?
- b Whether the procurement was made as per the procurement plan?
- c Whether the method adopted for procurement was as per the threshold limits given in the procurement manual?
- d Whether the procurement sub-committee was involved in the procurement procedure?
- e Whether the overall procurement was done within a reasonable time?
- f Whether there was any avoidable delay at any stage/ stages of the procurement process?
- g Whether the necessary approval was taken from appropriate authority wherever required?
- h Whether proper and adequate documents relating to procurement were maintained?
- i Whether the technical and financial evaluation was done properly and in a fair manner?
- j Whether the contracted firm, supplied the goods or executed the work as per the quality, quantity and price agreed upon?
- k Whether the goods were supplied or works executed in time, if not liquidated damages as per agreed conditions of contract were enforced/recovered and properly recorded in stock books/works registers after inspection?
- l Whether the payment was made to the supplier/ contractor in time? If not, reasons for delay.

8.2 As part of internal and statutory audit, review of all the contracts under the Project shall be conducted by the Internal and Statutory auditors as per laid down procedure.

Internal Auditors: Internal auditor's (firm of chartered accountants) will be appointed by NPMG, SPMG and PEAs for conducting the Financial Audit at the Department level. The TOR of financial audit will include adequate requirement to cover review of procurement activities. The auditor will carry out the review of procurement procedures adopted for works, goods and consultancy services. **Statutory Auditors:** The statutory audit of the Program will be conducted by the Comptroller and Auditor General of India/Chartered Accountant Firms, who will also review the procurement procedures adopted and give a report accordingly.

8.3 In addition to internal and statutory audits, the World Bank will also have the right to conduct post review of the contracts at the central, states, and the districts levels. The concerned authorities will be required to make all relevant documentation available to the World Bank, as and when required. In case of contracts that require prior review by the Bank, PEAs shall submit their documentation to the respective SPMG for review and forwarding to the Procurement Unit of the NPMG. All submissions for prior review to the Bank shall be made only after review and acceptance by the NPMG. The process of Bank's review will be based on the following:

- (a) It is the Bank's policy to require that Borrower's, as well as bidders, suppliers, and contractors under Bank financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Bank will have the right to require that a provision be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers, and contractors to permit the Bank to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Bank.
- (b) Contracts which are (i) not subject to prior review by the Bank, and (ii) awarded following these guidelines will be post reviewed by the Bank.
- (c) The Borrower shall retain all documentation with respect to each contract (excluding contracts subject to prior review by the Bank) during project implementation and up to two years after the closing date of the Loan Agreement. This documentation would include, but not be limited to, the signed original of the contract, the analysis of the respective proposals, and recommendations for award, for examination by the Bank or its Consultants. The Borrower shall also furnish such documentation to the Bank upon request. If the Bank determines that the goods, work or services were not procured in accordance with the agreed procedures, as reflected in the Loan Agreement and further detailed in the Procurement Plan approved by the Bank or that the contract itself is not consistent with such procedures, it may declare misprocurement as established in the procurement guidelines. The Bank shall promptly inform the Borrower the reasons for such determination.

8.4 Record Keeping: The Project shall retain all documentation with respect to each contract during project implementation and up to two years after the closing date of the Loan Agreement. This documentation would include, but not be limited to, the signed original of the contract, the analysis of the respective proposals, and recommendations for award, for examination by the Bank or by Consultants. The Borrower shall also furnish such documentations to the Bank on request. Most Purchase Department maintains the following basic records:

- i) **PURCHASE ORDER LOG**---It contains a numerical brief record of all Purchase Orders issued. It contains Purchase Order nos., supplier's name, brief description of purchase, total value of the order etc.
- ii) **OPEN ORDER FILE**---contains status of all outstanding orders.
- iii) **CLOSED ORDER FILE**---contains historical data of all completed purchases.
- iv) **VENDOR RECORD FILE**---contains the names, addresses of suppliers, materials that a vendor can supply, delivery and quality records.
- v) **RATE CONTRACT FILE**---contains the purchase records of items under a term contract. It is specially important when the contract is an open one against which orders may be placed.
- vi) **PURCHASE REPORTS**--- Since the Purchase Deptt. handles a sizable portion of organization finances, it is desirable to have some summary reports periodically (monthly/quarterly/ half yearly/ annually) available to the management. Some of important reports are;
 - a) Total value of purchase
 - b) Allocation of purchase value against major items
 - c) Budget for purchase for the next year
 - d) Proposal for revision of budget in current year

8.5 Besides the above, the Purchase Officer responsible should maintain all the records of issue, receipt, opening, evaluation of tenders, award of contracts i.e. all pre-order and post-order records in chronological order and the files kept in an identified place and should be retrievable for scrutiny whenever needed without wastage of time. Records of complaint handling, correspondences with clients, consultants, Bank Vendors etc. also shall be kept separately and should be retrievable.

Annexes

Sample Procurement Plan

General

1. **Project information:** [Example: Country, Borrower, Project Name, Loan/Credit No., Project Implementing Agency (PIA) etc. The Project team may decide to have different sections to reflect projects with many PIAs]
2. **Bank’s approval Date of the procurement Plan** [Original:.....;]
3. **Date of General Procurement Notice:**
4. **Period covered by this procurement plan:**

II. Goods and Works and non-consulting services.

1. **Prior Review Threshold:** Procurement Decisions subject to Prior Review by the Bank as stated in Appendix 1 to the Guidelines for Procurement: [Thresholds for applicable procurement methods (not limited to the list below) will be determined by the Procurement Specialist /Procurement Accredited Staff based on the assessment of the implementing agency’s capacity.]

	Procurement Method	Prior Review Threshold	Comments
1.	ICB and LIB (Goods)		
2.	NCB (Goods)		
3.	ICB (Works)		
4.	NCB (Works)		
5.	ICB (Non-Consultant Services)		
	[Add other methods if necessary]		

2. **Prequalification.** Bidders for _____ shall be prequalified in accordance with the provisions of paragraphs 2.9 and 2.10 of the Guidelines.
3. **Proposed Procedures for CDD Components (as per paragraph. 3.17 of the Guidelines:** [Refer to the relevant CDD project implementation document approved by the Bank]
4. **Reference to (if any) Project Operational/Procurement Manual:**
5. **Any Other Special Procurement Arrangements:** [including advance procurement and retroactive financing, if applicable]

6. Procurement Packages with Methods and Time Schedule

[List the Packages which require Bank's prior review first and then the other packages]

1	2	3	4	5	6	7	8	9
Ref. No.	Contract (Description)	Estimated Cost	Procurement Method	Prequalification (yes/no)	Domestic Preference (yes/no)	Review by Bank (Prior / Post)	Expected Bid-Opening Date	Comments

III. Selection of Consultants

1. Prior Review Threshold: Selection decisions subject to Prior Review by Bank as stated in Appendix 1 to the Guidelines Selection and Employment of Consultants:

	Selection Method	Prior Review Threshold	Comments
1.	Competitive Methods (Firms)		
2.	Single Source (Firms)		
	[Add specific methods if necessary]		

2. Short list comprising entirely of national consultants: Short list of consultants for services, estimated to cost less than \$500,000 equivalent per contract, may comprise entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

3. Any Other Special Selection Arrangements: [including advance procurement and retroactive financing, if applicable]

4. Consultancy Assignments with Selection Methods and Time Schedule

1	2	3	4	5	6	7
Ref. No.	Description of Assignment	Estimated Cost	Selection Method	Review by Bank (Prior / Post)	Expected Proposals Submission Date	Comments

IV. Implementing Agency Capacity Building Activities with Time Schedule

1. In this section the agreed Capacity Building Activities are listed with time schedule

No.	Expected outcome / Activity Description	Estimated Cost	Estimated Duration	Start Date	<i>Comments</i>

Annex 2 FLOW CHART FOR PROCUREMENT OF GOODS (NCB)

