

Annex-4: DETAILED TERMS OF REFERENCE FOR PROJECT IMPLEMENTATION CONSULTANTS

I. Background

1. The Government of Bangladesh has applied for a sector loan from the Asian Development Bank, grant cofinancing from the Government of the Netherlands and loan financing from the International Fund for Agricultural Development, for the implementation of the Participatory Small Scale Water Resources Project (PSSWRP). It intends to utilize part of the project funds for project implementation consulting (PIC) services. The executing agency (EA) for the project is the Local Government Engineering Department of the Ministry of Local Government, Rural Development and Cooperative (MoLGRDC).

2. The Participatory Small Scale Water Resources Project (PSSWRP) has a highly participatory and decentralized design with activities focused on subdistrict (upazila) and district levels. It is based on lessons learned from earlier ADB investments (in Bangladesh) in the small-scale (less than 1,000 ha.) water resources sector under the first Small Scale Water Resources Sector Development Project¹ (SSWRDSP) and subsequent, ongoing Second SSWRDSP.² The PSSWRP will support the development of stakeholder-driven water management cooperative associations (WMCA) which are suitably resourced in social and technical capital to improve system operation, have clear financing partnerships/cost sharing mechanisms for sustainable maintenance (with increased financial resources) and, within an enabling (and sufficiently decentralized³) institutional framework, are capable of maximizing their collective potential to increase agriculture production in subproject areas.

3. The objective of PSSWRP is to enhance agricultural productivity and sustainability in subproject areas to reduce poverty incidence, generate incremental incomes from agriculture production and improve social indicators of rural water users and vulnerable groups within a supportive and responsive institutional framework. This will be achieved through three components:

- A. Institutional Strengthening
- B. Participatory Subproject Development
- C. Small Scale Water Resources Infrastructure and Project Implementation Support

4. Component A will culminate in capacity and capability enhancement of the Integrated Water Resources Management Unit (IWRMU) of LGED to provide a suitably supportive framework for internalizing and institutionalizing the small-scale water resources (SSWR) development process. This will include: (a) raising IWRMU profile by upgrading water resources management to the organizational and managerial level of an Additional Chief Engineer, clarity in vision, mission and mandate and greater exposure through participation in regionally-based IWRM organizations; (b) reinvigorating and enhancing the Regional level of LGED to provide operation and maintenance (O&M) and monitoring and evaluation (M&E) support to new and completed subprojects; (c) institutional strengthening and operational support for Department of Cooperatives (DOC), specifically the establishment of a dedicated Water Cell capable of

¹ Loan 1381-BAN, for \$32.0 million, approved on 26 September 1995 and implemented from 1996 to 2002, developed 280 subprojects in the western part of the country.

² Loan 1831-BAN, for \$34.0 million, approved on 12 July 2001 and implemented between 2002 and 2009, will develop 275 subprojects in 61 of 64 districts.

³ Decentralization of responsibilities will be accompanied by corresponding increase in fiscal and human resources.

providing statutory and regulatory support to WMCAs (new and completed subprojects); (d) improved links with partner line departments primarily agriculture and fisheries extension support and (e) improved and more practical WMCA performance (including poverty reduction) monitoring and evaluation indicators and suitably reflective enhancement of management information system database.

5. Component B will support implementation of critical aspects of participatory subproject development specifically: (a) subproject identification and pre-screening which are essential for broad-based stakeholder commitment and equitable distribution of benefits; (b) WMCAs achieving the required development targets (e.g. membership enrollment, functional committees, registration, cash contribution for first year O&M, elections); (c) enhanced incomes of vulnerable groups through improved performance and greater transparency in Labor Contracting Societies (LCS)⁴ activities and other specific actions; (d) enhanced agriculture production and incomes delivered, extending links with input delivery, technical support, post harvest storage facilities and product marketing; and (f) rigorous post construction support (new and completed subprojects) for system operation and maintenance through improved planning and preparedness, field support, enhanced technical and financial management skills of WMCAs and incentivizing maintenance activities through cost sharing mechanisms.⁵

6. Component C will undertake infrastructure development of up to 250 small-scale water resources systems, typically comprising flood management and drainage improvement, water conservation and command area development (CAD). Activities will include (a) more rigorous subproject selection from technical perspective and community participation to develop technical solution and approval; (b) intensified construction supervision for quality control and (c) performance enhancement of completed subprojects where institutional capacity of WMCA is clearly demonstrated for further value addition. The project will cover all 64 districts of Bangladesh although infrastructure development will not be undertaken in three districts of Chittagong Hill Tracts (CHT).

7. The IWRMU was established in 2004 under Second SSWRDSP and is strategically placed to support project implementation activities. The unit comprises five sections: Planning and Design, O&M, Environment and Safeguards, Social and Gender Development and Project Implementation Offices. Consultancy services will be distributed laterally within IWRMU for efficient and subsector specific support. For the initial four years the project will be implemented in parallel with the Japan Bank for International Cooperation (JBIC) funded Small Scale Water Resource Development Project which is restricted to three Greater Districts of Bangladesh (Greater Mymensingh, Greater Faridpur and Greater Sylhet, covering 15 districts).

II. Scope of Services

A. General Scope of Services

8. Consulting services will be provided by an international consulting firm in association with a national consulting firm in accordance with ADB's *Guidelines on the Use of Consultants* (February 2007, as amended from time to time). The consulting firm will ensure that LGED receives the necessary support in accordance with a predetermined implementation schedule.

⁴ Temporary unregistered organizations comprising poor and more vulnerable groups which is recognized to execute unskilled labor intensive earthworks for cash payment.

⁵ Current indicators for WMCA performance focus on financial achievements rather than holistic range of post construction indicators.

The consultants will be engaged under a single contract, comprising international and national consultants acting as one team of experts. In support of the three components of PSSWRP, the consulting services aim to improve capacity and operational effectiveness of IWRMU, LGED and other departments responsible for project implementation and to develop functional and self sustaining WMCAs.

9. Based on prior experience of SSWRDSPs, PIC will assist the project implementation office (PIO) and district and upazila offices in implementing key improvements for institutional strengthening, subproject development process and infrastructure development to deliver project outputs. The PIC team will support all aspects of the project implementation including but not limited to: (i) capacity development and strengthening performance of LGED as a service provider for SSWR management systems; (ii) reviewing feasibility studies for subproject development to ensure their compliance with social, technical, environmental and economic criteria; (iii) supporting and ensuring participation of WMCAs in subproject development process; (iv) institutional strengthening of WMCAs; (v) reviewing and advising on detailed design; (vi) facilitating supervision of civil works to ensure WMCAs are involved in the design and implementation process and quality delivery; (vii) promoting services and links that provide agriculture and livelihood support; (viii) technical advice and facilitation for operation and maintenance planning by WMCAs and LGED (IWRMU and district/upazila levels) for sustainable SSWR management systems; (ix) subproject development compliance with national and ADB social and environmental safeguard policies; (x) facilitation of resettlement plan (RP) implementation; and (xi) refinement of existing MIS database with improved monitoring indicators to provide feedback mechanism and responsive support services.

B. Scope of Services

10. Consultants will be selected and engaged in accordance with the ADB *Guidelines on the Use of Consultants* (2007, as amended from time to time). Firms carrying out project implementation consulting services will be selected through international competition using the quality- and cost-based selection method. A total of 1,267 staff-months of consulting services including 64 months of international and 1,203 months of national consultants will be required for the project. Project implementation is scheduled to commence on 1 July 2009 for a period of 96 months until 30 June 2017. Main activities are described below.

1. Component A: Institutional Strengthening

11. The PIC consultants will enhance institutional capacities of LGED, specifically of IWRMU and LGED offices at regional, district and upazila levels to manage participatory subproject development process, establish effective water management cooperative associations (WMCAs), support planning and implementation of sustainable O&M. The following activities will be carried out under this component:

- Further development (to the preceding TA outputs), implementation, and monitoring of training for project and partner line department staff, WMCAs, and institutions/firms/agencies to be involved in participatory subproject development processes;
- Outputs of a separate study for O&M strategy development will be synthesized in to IWRMU operations and operationalized at headquarter and field levels through capacity development and enhancement of existing training materials;

- Support for the steps of institutional strengthening action plan defined under the preceding TA for fully operationalizing institutional strengthening recommendations of IWRMU and sustainable system O&M;
- Coordination with technical assistance to be provided for DOC institutional strengthening and capacity building, specifically adoption of recommendations for IWRMU cooperation and information sharing;
- Support for IWRMU's further refinement and reorientation of existing MIS database to fully incorporate monitoring indicators for system operation and maintenance performance, provide a "responsive" set of outputs to be used as feedback rather than reporting database and with wider/shared access to facilitate regulatory activities of DOC and other partner line departments.

12. The PIC services will also be responsible for formal and non-formal training activities of IWRMU and other partner agencies, including Department of Agriculture Extension (DAE), Department of Fisheries (DOF) and Department of Cooperative (DOC). This responsibility will include supporting PIO in identifying participants and organizing training that is outsourced to third parties, developing, organizing, and delivering training programs for which the PIC assumes responsibility, and ensuring adequate monitoring is in place that provides feedback that is useful to strengthen the training activities.

13. Support to partner line departments, local institutions/firm/agencies/individuals recruited for social mobilization and livelihoods training will include familiarization with project activities and assistance with the preparation of training modules specific to WMCA needs. Institutional strengthening and capacity building of DOC specific to performance of statutory, regulatory and promotional functions will be undertaken through a separate technical assistance and specialist staff.

14. Where appropriate course content will enhance existing training materials developed and used under previous phases of the project, while some courses will need to be newly developed. The training will review preceding TA capacity development program and make any required adjustments in consultation with IWRMU.

15. PIC will provide technical support and facilitate raising IWRMU profile on international and regional forum through promotional activities (with ADB and cofinancer support). IWRMU through the Project will establish an institutional arrangement with the Bangladesh Water Partnership (BWP) and other relevant organizations including International Network for Participatory Irrigation Management, World Water Council, International Committee for Irrigation and Drainage and International Water Management Institute.

2. Component B: Participatory Subproject Development

16. The PIC team will support IWRMU and LGED offices at the circle, district and upazila levels to ensure the effective participation of local stakeholders and the sustainability of completed schemes. Specific services to be provided will include:

- (i) Ensure procedures for identification, feasibility assessment, planning, design, implementation and O&M of small scale water resource development subproject are modified in line with outputs of TA and are periodically reviewed and updated (as required);
- (ii) Ensure selected subprojects are in compliance with social, technical, environmental and economic criteria as established during preceding TA;

- (iii) Assist IWRMU in designing and carrying out a media awareness campaign on national television, radio and newspapers describing the Project's principal characteristics and advising potential beneficiary communities on procedures to seek project support;
- (iv) Assist IWRMU in implementing existing LGED procedures, guidelines and manuals for small scale water resources development in the implementation of subprojects and modify these from time to time in response to identified/evolving needs;
- (v) Support IWRMU in selection of suitable institutions/NGOs/agencies/individuals to undertake subproject development activities including participatory rural appraisal (PRA) of proposed subprojects, ensuring stakeholder participation, formation and development of WMCAs and training and provision of technical support to labor contracting societies (LCSs);
- (vi) Assist IWRMU to draft agreements for the engagement of local institutions/NGOs/agencies/individuals to undertake participatory rural appraisal (PRA) of proposed subprojects, social mobilization activities, support labor contracting societies to undertake subproject earthworks, livelihoods and O&M support for WMCAs. Assist in their field supervision and performance assessment;
- (vii) Assist IWRMU in interpreting and analyzing PRA results and in reviewing and strengthening feasibility studies and detailed design outputs;
- (viii) Review and modify, as appropriate, existing models for the implementation and lease agreements to be entered into by each WMCA;
- (ix) Assist the LGED district offices with the establishment of upazila level conflict resolution mechanism and other liaison/consultative committees with LGIs and oversee establishment at each subproject site;
- (x) Provide field level technical expertise to supervise implementation of civil works and institutional strengthening of WMCAs, monitor and facilitate associated data collation for MIS database;
- (xi) Assist and provide technical expertise to IWRMU Environmental and Safeguards Section and Social and Gender Development Section in preparation and implementation of social and environmental safeguard requirements in accordance with project resettlement framework, indigenous peoples development framework and environmental review and assessment procedures;
- (xii) Assist and provide technical expertise to IWRMU Social, and Gender and Development Section in strengthening awareness of project gender development strategy and implementing gender action plan;
- (xiii) Facilitate IWRMU and district/upazila staff in identifying, planning and implementation of poverty reduction activities for landless/marginal farmers and vulnerable groups, including planning, implementation and monitoring;
- (xiv) Facilitate IWRMU O&M Section in (technical and institutional performance) categorization of existing subprojects to assess eligibility for performance enhancement funding, needs identification, plan for development, implementation and monitoring;
- (xv) Provide technical expertise in adoption and operationalizing O&M strategy at field and IWRMU level including development of subproject specific operation and maintenance plans, strengthening WMCAs role in implementation and revolving fund operation and management and performance enhancement at existing subprojects.

3. Component C: Small Scale Water Resources Infrastructure and Project Implementation Support

17. The PIC (together with guidance from the IWRMU Advisor⁶) will support IWRMU and WMCAs in the development of small scale water resources management systems comprising flood management, drainage improvement, water conservation and CAD. PIC will assist in ensuring infrastructure and its use will (i) conform to national policies and ADB requirements (in particular for social and environmental safeguards); (ii) meet the needs of the beneficiaries without causing undue conflict with other water users; (iii) be of good quality; and (iv) be sustainably operated and maintained in good working condition. The services to be provided will include:

- (i) Provide technical expertise and assistance to LGED to complete district water resources assessments;
- (ii) Assist IWRMU with the ongoing review and modification, as appropriate, of existing indicators for socio-economic criteria and economic analysis applied to the selection, appraisal and ranking of subprojects;
- (iii) Assist IWRMU Environmental and Safeguards Section (ESS) with the ongoing review and modification of existing guidelines and processes for undertaking initial environmental examinations (IEEs) of subprojects and assist IWRMU ESS with the selection and supervision of preparation and implementation of IEEs;
- (iv) Participate in reconnaissance visits to prospective subproject sites to jointly assess their technical, agricultural and economic viability, social acceptability and environmental soundness and subsequent analysis of data;
- (v) Assist IWRMU in the ongoing review and modification of existing procedures and guidelines for the collection of technical, socio-economic, agricultural, and environmental information to be used in the feasibility analysis of proposed subprojects;
- (vi) Facilitate IWRMU in recruitment of consulting services for project implementation activities including (a) PRA activities, (b) preparation of feasibility studies of proposed subprojects, (c) detailed design, (d) agriculture, fisheries and O&M facilitators; (e) locally sourced community assistants for social mobilization and (f) specialist individual services. Provide supervisory support for quality control of associated outputs;
- (vii) Facilitate and provide technical advice to IWRMU Implementation Section for (a) procurement of civil works and contract administration to ensure compliance with national and ADB guidelines;
- (viii) Assist IWRMU in the ongoing review and modification, as appropriate, of existing standards for the design of small scale water resource development subprojects;
- (ix) Review and modify/update as required draft resettlement plan for subproject following completion of detailed design to ensure any further adjustments requires are accommodated in final RP. Ensure implementation actions are taken in accordance with project resettlement framework (RF);
- (x) Support IWRMU in establishing effective arrangements for the supervision of construction work carried out by contractors and LCS groups, facilitate implementation supervision for quality control and develop and pilot options for improving LCS performance;
- (xi) Assist IWRMU Maintenance Section in ongoing review and modification of existing guidelines and manuals for sustainable O&M by the WMCAs and O&M

⁶ To be recruited directly as an individual consultant and not included in the TOR for PIC services.

- training procedures for WMCAs – taking into account the recommendations of the O&M Study;⁷
- (xii) Support IWRMU Maintenance Section in implementation of O&M strategy as modified and further developed under ADB funded study⁷;
 - (xiii) Support IWRMU and WMCAs in design and implementation of performance enhancement activities on existing subprojects to maximize subproject potential and benefits.

18. The ongoing SSWRDSP project has a well established project performance monitoring system (PPMS) and comprehensive MIS database. The Project will continue to undertake a Benefit Monitoring and Evaluation (BME) for impact assessment. Baseline data has been established for earlier projects and BME is contracted to a private organization at five yearly intervals. The process has been reviewed and is considered suitable for further continuation under PSSWRP. Effect Monitoring and Evaluation (EME), or short-term monitoring has been undertaken annually (on the ongoing second SSWRDSP) and is based within an extensive Management Information System (MIS) operated by the current PIO and IWRMU. PIC services will support IWRMU in continued monitoring and evaluation of (i) subproject benefits specifically improvements in rural livelihoods through increased agricultural (and fisheries) production, poverty reduction, social empowerment through well functioning WMCAs and social and environmental impacts. Specific monitoring and evaluation services to be provided include:

- (i) Facilitate IWRMU and regional, district and upazila levels in review and modification, of existing parameters and procedures for project BME and EME and assist in implementing M&E process. Reflect modifications in further development/refinement of existing MIS database and expand its utilization/access to other project related users;
- (ii) Provide technical advice to IWRMU in review and modification, as appropriate, of existing procedures for environmental monitoring;;
- (iii) Assist IWRMU ESS in undertaking environmental monitoring at subproject sites.

C. Consultants' Team

19. The consultants' team will directly report to Project Director (PD) of PIO who is responsible for overall PIO management including contract administration of all services and civil works; monitoring and support of subproject implementation; and coordination and communication with regional, district and upazila staff, line departments, and other stakeholders (including other on-going sector projects). The team will also report to Additional Chief Engineer (IWRMU) and Chief Engineer LGED regarding institutional strengthening support and other matters requiring specific guidance. The overall organizational structure is shown in Figure A.1 of Appendix A.

20. It is proposed that three international consultants and 26 national consultants be engaged, over the 96-month period of the Project, for a total of 64 person-months for international and 1,203 person-months for national consultants. Total consulting input is 1,267 person months. A summary of consulting services inputs is shown in Table 1.

⁷ The O&M Study was undertaken by ADB in May to September, 2008 and has been published as Supplementary Appendix H of the PSSWRP preparation – ADB TA 7041-BAN. Based on recommendations made by the study a subsequent ADB funded assignment is to be undertaken in Feb/March 2009 to further develop LGED's existing O&M strategy to better address the needs of SSWR. Study completion is scheduled to coincide with PSSWRP implementation.

21. The assignments of the consultants will require substantial experience in their respective fields. Preference would be given to international consultants with experience in south Asia and fluency in English will be essential for all consultants. The Project is scheduled to commence on 1 July 2009 and to operate over a period of ninety-six months until 30 June 2017.

Table 1: Staffing Requirements of PIC Services

Designation	Duration (p-m)	Responsibilities
International Consultants		
Team Leader/Water Resources Management Specialist	60	Guide, direct, manage and report on Team inputs and outputs; provide technical, administrative, and reporting support to the PD; assist with developing and operationalizing monitoring systems, ensure sufficient training and capacity development at IWRMU, regional, district and sub district levels, WMCAs and supporting partner line departments, support overall subproject development and project implementation, comply with ADB reporting requirements and performance monitoring.
Safeguards Specialist	4	To provide technical advice to LGED to supervise, in collaboration with LGED District Engineers Office and relevant sections of IWRMU in supervising RP implementation. Support capacity building of IWRMU safeguard staff, supervise and review preparation of RPs and facilitate and strengthen WMCA/UP representative role in RP implementation.
Total	64	
National Consultants		
Deputy Team Leader/Planning and Design Specialist	88	Assist IWRMU in planning and design of subprojects in a participatory manner (including preparation of district water resources assessment reports); identify data requirements; ensure subproject selection criteria are met and required data collected and analyzed. Provide technical, administrative, and reporting support to the PD; assist with developing and operationalizing monitoring systems, preparing and delivering training. Facilitate PD with technical advice for procurement of services, goods and works and implementation schedule of project, coordinating role with LGED, WMCAs, LGI and partner line departments to ensure consolidated efforts for subproject development and post construction support.
Water Resources Planning Engineers (2 positions)	88	Assist IWRMU in preparation of district water resources assessments, in planning to prepare and finalize designs in a participatory manner for the irrigation system; identify data requirements; ensure that PPs are consulted and the response of the PPs to proposed designs is documented
Hydraulic Design Engineers (2 positions)	88	Provide technical advice and assistance in review of engineering/hydraulic design of SSWR management systems including performance enhancement of systems.

MIS Specialist	6	Review and reorientate existing MIS database (and associated monitoring indicators) to provide service oriented outputs which are utilized to provide responsive support to WMCAs, develop options for data/database sharing between partner line departments and greater effectiveness/practical utilization of system, capacity building of relevant staff in system operation and utilization.
Social Safeguard Specialist	30	Provide technical advice and support to ESS and SGDS for preparation and implementation of RPs, contribute to capacity building of WMCA/local representatives/IWRMU for implementation of RP, support monitoring and feedback mechanisms and facilitate in liaison and coordination with relevant agencies.
Environmental Specialist	30	Facilitate and provide technical advice to ESS on preparation and quality control of subproject environmental outputs, support approval process, advise on day-to-day environment related activities and monitoring, facilitate environmental management and mitigation plan (EMMP) implementation.
Gender Specialist	81	Assist IWRMU/SGDS in implementing gender strategy and associated gender action plan for full participation of women in subproject planning, implementation and O&M and targeted rural livelihoods support activities.
Agriculture Specialist	44	Assist IWRMU agriculture staff to support field activities undertaken through DAE staff and agriculture facilitators to guide development of agriculture plans and capacity development initiatives, identify relevant agriculture programs that can be promoted at the field level and provide technical expertise/advice to improve market links and provision of quality inputs. Coordinate extension activities with DAE and WMCA, facilitate performance monitoring.
Fisheries Specialist	9	Assist IWRMU fisheries staff to support field activities undertaken through DoF and fishery facilitators to guide development of fisheries plans and capacity building initiatives, identify relevant fisheries programs that can be promoted at the field level and provide technical expertise/advice to improve market links and provision of quality inputs. Coordinate extension activities with DoF and WMCA, facilitate performance monitoring and implementation of mitigation plans.
Rural Livelihoods Specialist	30	Support international Rural Livelihoods Specialist ⁸ . Review rating of WMCA microfinance performance, provide technical advice and identify specialist resources requirements for strengthening microfinance support, advise on performance monitoring indicators, provide WMCA links with appropriate microfinance institutions for livelihood support activities and capacity building.

⁸ The specialist is to be recruited directly by IFAD through their project start up funds.

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 Supplementary Appendix G – Subproject Development Process

Training Communication Specialist	45	Prepare project-related newsletters; training videos; facilitate implementation of project awareness campaigns including managing development of specific training aids (training videos, manuals, leaflets etc); assist with organizing training programs; and support safeguard disclosure and dissemination requirements through print and audio/visual media.
Operation and Maintenance Specialist	88	Assist in developing project specific maintenance manuals for all levels of SSWR system; assist with developing improved operation and maintenance practices; ensure that systems operation is in response to WMCA requirement; develop training materials and deliver training, support supervision of maintenance activities.
Participatory Development/M&E Specialist	88	Assist in strengthening state and field level institutions for PIM/Command Area development; support PMU in improving systems to strengthen PPs; develop subproject and state level MIS for PP development, develop appropriate training and deliver training; assist in managing and monitoring activities of field staff.
Construction Monitoring & QC Specialists (4 positions)	200	Provide on-site support in quality construction of main and distribution systems and related activities and report back to the Upazila Engineer / Project Director.
Senior Institutional Development Specialist	88	Lead Institutional Development Specialists to support IWRMU/SGDS in participatory planning, design and implementation of subproject activities for social development and poverty reduction. Facilitate in recruitment of services for PRA, assist in supervision of activities and analysis of data output and preparation of relevant sections of feasibility studies. Assist in implementation of capacity building plan and other activities linked to poverty reduction including coordination with specialist staff to contribute to development of social capital for self sustaining WMCAs..
Institutional Development Specialists (4 positions)	200	Provide field level support to WMCAs and LGED field staff in implementing subproject development process, maximizing beneficiary participation and decision making, providing capacity building support for institutional strengthening and facilitating performance monitoring and evaluation.
Total	1,203	

D. Job Description and Qualifications of Consultants' Key Staff

1. International Consultants

a. Team Leader/Water Resources Management Specialist/ (60 p-m)

22. The Water Resources Management Specialist/Team Leader will supervise all aspects of project implementation and work in close cooperation with the PD PIO and other relevant staff. The Team Leader will have an advanced degree in water resources or related subject and a minimum of 15 years of demonstrated international experience with irrigation systems, with at least some of the experience in Asia. Prior experience in leading multi-disciplinary and multi-national teams will be a requirement. The Team Leader will assume overall responsibility for implementation and delivery of PIC outputs and will work closely with the IWRMU Advisor (to be recruited as an individual consultant outside the scope of PIC services). The consultant will:

- (i) Prepare an Inception Report including methodology and detailed work plan for the PIC Team that conforms to the project implementation arrangements specifying loan implementation milestones;
- (ii) Guide, coordinate and support activities of PIC Team providing overall guidance and direction and ensure that PIC Team works in harmony with IWRMU;
- (iii) Assist, plan and undertake actions to seek clearances by the Government and ADB relating to project/subprojects to meet their guidelines and standards, including subproject approval with social and environmental safeguard requirements fulfilled. Assist the Project Director and coordinate regular reporting of project activities and in planning, and coordinating PIC inputs;
- (iv) Establish project management and reporting procedures consistent with the requirements of ADB and the Government, and ensure these procedures are followed throughout the Project;
- (v) Support capacity building of IWRMU and LGED regional, district and sub district levels to implement subprojects following the subproject development cycle. Similarly for WMCAs to progress to self sustaining community based organizations with sufficient capabilities to implement resettlement plans;
- (vi) Continue to promote integration of institutional development and technical aspects of the project in accordance with the subproject development cycle;
- (vii) Monitor and advise PIC Team in their actions to support institutional development and technical support for operationalizing O&M strategy (for SSWRS management systems) within IWRMU;
- (viii) Review PRA analysis and feasibility studies to ensure subproject selection criteria are met and for quality control of documents and designs;
- (ix) Provide support to PD and relevant sections of IWRMU in recruitment of consulting services (including direct engagement of locally based community assistants), civil works (including LCS earthworks) and goods including guidance on preparation of standard bidding documents and facilitation during bidding process;
- (x) Assist and advise IWRMU in project management and performance monitoring, with effective and updated management information system, (MIS) encompassing baseline, processes, and outputs, including WMCA development, scheme performance, and impacts;
- (xi) Assist IWRMU/LGED in implementing changes to the Organizational Structure and facilitate LGED, DOC and other partner agencies in organizational change

- necessary to better address the needs of small scale water resource development;
- (xii) Assist in developing training materials (including for project management) and deliver training as required under capacity building plan;
 - (xiii) Facilitate IWRMU in maintaining quality control of project implementation including construction works and institutional strengthening of WMCA and respond to evolving organizational needs;
 - (xiv) Facilitate LGED in maintaining policy dialogue and coordination with partner line departments and ministries for participatory integrated water resources management;
 - (xv) Support IWRMU/LGED in strengthening its role on a regional and international level in the context of integrated water resources management and bringing lessons learned/experiences of the project to wider forum through the Global Water Partnership, Bangladesh Chapter and other relevant knowledge hubs.

b. Safeguards Specialist (4 p-m)

23. The international Safeguards Specialist will have a postgraduate degree in anthropology/sociology or related social science subjects and at least 10 years international experience in social safeguards including involuntary resettlement and indigenous peoples development. The Safeguards Specialist will have applied knowledge of involuntary resettlement and indigenous peoples policies of the ADB and directly support national Resettlement Specialist and other relevant persons in IWRMU in implementation of resettlement plans (and other social safeguards). Specific activities will include:

- (i) Familiarize national consultants, particularly Safeguards Specialist, Environmental Specialist and Gender Specialist with environmental and social safeguard requirements for subproject preparation and implementation, including ADB's policies on Involuntary Resettlement and Indigenous Peoples;
- (ii) Assist and advise on the preparation of resettlement plans and indigenous peoples development plans (as required) for subprojects in conformity with Resettlement and Indigenous Peoples Development Frameworks of PSSWRP;
- (iii) Assess training requirements of those involved in resettlement plan (RP) implementation and accordingly prepare training modules/materials for capacity building of ESS and SGDS, also field staff and WMCA;
- (iv) Review safeguard activities and outputs of national consultants and contracted NGOs, firms and/or institutions to ensure they are in compliance with ADB safeguard policies and resettlement and indigenous peoples development framework;
- (v) Jointly prepare (with LGED, IWRMU's Senior Sociologist, other associated partner/relevant ministries and line departments) Payment Modality for further approval by Head IWRMU. The approved Payment Modality will be adopted for RP implementation.

2. National Consultants

**a. Deputy Team Leader / Planning and Design Specialist
(88 p-m)**

24. In general, the specialist will work with IWRMU Planning and Design Section (PDS) and PIC Water Resources Planning Engineers to provide support and technical advice for

developing SSWR management systems. Additionally, the specialist will assist in preparation of district water resources assessment reports and will impart technical training to IWRMU, regional, district and sub district staff. The Deputy Team Leader/Planning and Design Specialist will also serve as the Deputy Team Leader and assume responsibility of day-to-day activities of the PIC Team when the Team Leader is absent. The specialist will be a civil engineer preferably with a Master's degree in irrigation/water resources engineering (or other relevant subject). The specialist will have a minimum of 15 years experience in planning and design of community participatory water resources projects and demonstrable experience of using appropriate computer software/programs for engineering design. Specifically, the Planning and Design Specialist will:

- (i) Provide technical advice and support for (technical aspects) of planning, design and implementation of SSWR management systems (including performance enhancement) at all stages of the subproject development process;
- (ii) In conjunction with IWRMU PDS and PIC technical (engineering) specialists support subproject planning, coordinating with other ongoing initiatives for a well planned implementation approach;
- (iii) Provide input to feasibility studies and review detailed engineering designs for technical consistency and cost estimation, also to suggest innovative alternatives for sustainable O&M of infrastructure;
- (iv) Provide technical advice for implementation of O&M strategy and performance enhancement options for existing SSWR infrastructure, specifically in terms of cost effectiveness, potential benefits and O&M sustainability;
- (v) Assist in preparation of progress and planning reports and capacity building of relevant IWRMU/LGED staff including regional, district and sub district levels;
- (vi) Provide guidance to IWRMU/LGED in procurement of goods and works to meet ADB and national guidelines, and further promote capacity building within the relevant LGED and IWRMU offices in procurement using national, and international, competitive bidding;
- (vii) Resume Team Leader's responsibilities in absence of the Team Leader particularly in implementation and financial management of PIC services, coordination with IWRMU/LGED and other partner agencies.

b. Water Resources Planning Engineer (2 persons, total 88 p-m)

25. The Water Resources Planning Engineer will be a civil engineer preferably with post graduate qualification in related field and at least 8 years experience in water resources projects. Demonstrated high level of computer literacy and software utilization skills are essential. The engineer will work closely with IWRMU Planning and Design Section (PDS) and other IWRMU and PIC staff. Specific responsibilities will include:

- (i) Work with PDS on planning subproject implementation particularly with a view to other ongoing water resources initiatives;
- (ii) Provide support to PDS in review of PRA outputs and ensuring technical, environmental and economic subproject selection criteria are met;
- (iii) Assisting IWRMU PDS in the review of subproject feasibility studies with particular attention to environmental implications including those of downstream users through cumulative impacts and other environmental and economic selection criteria;
- (iv) Support PDS and other relevant staff in preparation of district water resources assessment reports;

- (v) Assist IWRMU in the review of subproject designs with particular concern for (a) cost effectiveness, (b) quality of design, (c) ease of sustainable maintenance, and (d) practical solutions; and
- (vi) Provide support to O&M related staff on categorization of subprojects for performance enhancement activities and associated implementation schedule.

c. Hydraulic Structure Design Engineer (2 persons, total 88 p-m)

26. Engineer will be a civil engineer preferably with post graduate qualification in related field and at least 8 years experience in water resources projects. Demonstrated high level of computer literacy and software utilization skills are essential. The engineer will work closely with IWRMU Planning and Design Section (PDS) and other IWRMU and PIC staff. Specific responsibilities will include:

- (i) Advise firms contracted to undertake detailed design at subproject sites on design standards for hydraulic structures, cost effectiveness, innovation and environmental impacts including (a) cumulative impacts of subprojects on stream flow and river level, (b) provision for migratory fish at structures; (c) minimization of land and asset acquisition, and (d) tree preservation;
- (ii) Assist IWRMU in the review of subproject designs with particular concern for (a) cost effectiveness, (b) quality of design, (c) ease of sustainable maintenance, and (d) practical solutions; and
- (iii) Review technical design of all hydraulic structures (and SSWR management system) prior to their final acceptance by IWRMU.

d. MIS Specialist (6 p-m)

27. The international MIS Specialist will have relevant qualifications in computer science or related field and preferably a postgraduate qualification with minimum 8 years experience in developing MIS and project monitoring and evaluation systems. The specialist will work as directed by the Team Leader and with other specialist staff on reviewing existing MIS database and performance monitoring indicators and reorienting the database to better meet needs of the evolving project. Specifically the specialist will:

- (i) Review existing MIS database with recommendations to streamline the system by removing elements not directly supporting subproject implementation, O&M, WMCA management, or providing the necessary information for sharply focused annual effect monitoring and evaluation (EME).
- (ii) Introduce and reorientate the existing system to better meet monitoring requirements for institutional development of WMCAs (in context of DOC institutional strengthening activities) and O&M performance monitoring;
- (iii) Review the EME process with recommendations for streamlining and progressive fine tuning information on SSWR development;
- (iv) In conjunction with relevant specialist staff make recommendations for collecting information on poverty and quantifying impacts on poverty reduction;
- (v) Make recommendations for post-implementation monitoring of compensation for land acquisition and resettlement at subprojects;
- (vi) Advise on establishment of an M&E coordination cell within IWRMU for the evaluation of MIS data as well as EME and long term benefit monitoring and evaluation (BME) reports;

- (vii) Provide technical support on shared access of MIS database to maximize utilization by partner line agencies with eventual transfer of data entry LGED Regional level; and
- (viii) Support EME and BME activities and assist in preparing progress and impact monitoring reports.

e. Social Safeguard Specialist (30 p-m)

28. The Resettlement Specialist will have a postgraduate degree in anthropology/sociology or related social science subjects and at least 8 years experience in involuntary resettlement. The specialist will have applied knowledge of ADB's policy for involuntary resettlement and will directly support the international Safeguards Specialist and other relevant persons in IWRMU in preparation and implementation of resettlement plans. Specific activities will include:

- (i) Provide technical support to the IWRMU ESS for preparation of resettlement plans (as required) in accordance with project resettlement framework;
- (ii) Supervise, in collaboration with LGED district and sub district staff, implementation of resettlement plans in accordance with project resettlement framework (RF);
- (iii) Undertake capacity building of IWRMU ESS and SGDS in preparation and implementation supervision of resettlement plans. Similarly undertake capacity building and provide technical backstopping to WMCAs to fully equip them for RP implementation;
- (iv) Undertake RP implementation progress reporting and other monitoring tasks as indicated in RF and agreed with IWRMU.

f. Environmental Specialist (30 p-m)

29. The Environmental Specialist will have an advanced science degree and will have at least 8 years of experience in environmental impact assessment. The specialist will be familiar with the environmental policies of ADB and Government of Bangladesh and will be responsible for assessing environmental safeguard requirements for individual subprojects. Also to review extent of LGED compliance on the ADB's Environmental and Social Safeguard Policies:

- (i) Ensure that firms/institutions and other organizations engaged are familiar with ADB and national guidelines for environmental safeguards and processes for preparing initial environmental evaluations (IEEs) and environmental mitigation management plans (EMMPs);
- (ii) Participate in reconnaissance visits to prospective subproject sites and supervise environmental data collection for subprojects;
- (iii) Review and provide technical guidance for preparation of IEEs;
- (iv) Review and modify as appropriate the existing procedures for environmental monitoring;
- (v) Oversee implementation of IEE and associated environmental monitoring and mitigations measures; and
- (vi) Develop training programs on environmental awareness and management for IWRMU personnel and for LGED personnel at regional, district and upazila levels, and for WMCAs.

g. Gender Specialist (81 p-m)

30. The Gender Specialist will have postgraduate qualifications in social sciences and at least 8 years experience in gender development on community driven development projects (specifically for water resources which will be an advantage). The specialist will work closely with IWRMU SAGDS and relevant PIC specialists will facilitate implementation of the project's gender strategy and gender action plan (GAP). Specific activities will include:

- (i) Based on PPTA recommendations (including lesson learned from earlier phases of SSWRDSP) facilitate IWRMU/SGDS in updating LGED gender strategy, implementation guidelines to compliment GAP for women's participation in small scale water resource development subprojects;
- (ii) Support IWRMU/SGDS in gender mainstreaming by promoting women participation in subproject planning, implementation and O&M, with a focus on generating employment opportunities for women;
- (iii) Provide technical support to IWRMU/SGDS for preparation of gender sensitive training programs including supervisory support for training and related activities such as workshops and seminars;
- (i) Act as resource person in delivery of training programs for men and women subproject beneficiaries, staff of IWRMU/LGED, partner line departments and other key persons (local community assistants, PRA and rural livelihoods support NGO) involved in subproject development activities;
- (ii) Provide oversight for women inclusion in PRA and inclusion of gender development activities in subproject feasibility reports, support quality control and compliance with GAP/gender strategy particularly in identification of rural livelihoods support activities for women;
- (iii) Together with IWRMU/SGDS, PIC specialist and LGED staff at district and sub district levels undertake capacity building of LCS including piloting of alternative options for eliminating men/women labor wage disparities and other provisions of GAP;
- (iv) Facilitate PIC Participatory Development / M&E Specialist to develop a range of gender disaggregated indicators that will enable effective monitoring of women's development. Contribute to periodic progress reporting and other gender specific reporting;
- (v) Coordinate with partner line departments particularly DOC, DAE, DOF to streamline implementation of GAP;
- (vi) Support PIC Team in incorporation of gender sensitive resource management interventions to ensure women's interest in the proposals, studies, activities and evaluations;
- (vii) Advise PIC Team Leader of suitable forum for promotion of project activities including regional and international seminars and workshops.

h. Agriculture Specialist (44 p-m)

31. In general, the Agriculture Specialist will assist IWRMU (Senior Agriculturalist) to support field agriculture staff at subproject level and within PRA and NGO livelihoods support team (specifically agriculture facilitator) to guide development of agriculture plans and to identify relevant agriculture programs that can be promoted at the field level. The Agriculture Specialist will have an advanced degree in agriculture with 8 years experience in agriculture extension and agribusiness promotion. The consultant will have demonstrable experience of using appropriate computer software/programs. Specific activities will include:

- (i) Coordinate with DAE, Department of Livestock Services (DLS), other relevant projects and the various agricultural institutes throughout the country to promote delivery of “state of the art” agricultural services through existing programs;
- (ii) Participate in reconnaissance visits to prospective subproject sites and provide advice on the preparation and review of subproject feasibility studies – oversee the agricultural analysis undertaken as part of the feasibility process;
- (iii) Develop models for integrated management of water for crop production and fisheries and income generating activities on embankment land and public wetlands for the benefit of disadvantaged groups, including women and those previously engaged in fishing (commercial or subsistence) in the subproject area;
- (iv) Assist partner agencies, particularly DAE and DLS in development and delivery of agricultural training programs for WMCAs – assist with training coordination and monitoring;
- (v) Provide field level supervisory support to DAE extension staff and agriculture facilitators to support WMCAs on agricultural development and provide post construction support on performance enhancement subprojects;
- (vi) Organize and conduct progress review meetings and capacity building activities at the field level for partner agencies responsible for the delivery of agricultural related services and WMCA strengthening;
- (vii) Review and advise on modification, as required, of MOUs between LGED and DOA and DLS for the support of those agencies to the Project; and
- (viii) Facilitate PIC Participatory Development / M&E Specialist to develop a range of indicators that will enable effective benefits monitoring of agriculture interventions. Contribute to periodic progress (and impact) reporting and other agriculture specific reporting;
- (ix) Advise PIC Team Leader of suitable forum for promotion of project activities including regional and international seminars and workshops.

i. Fisheries Specialist (9 p-m)

32. The Fisheries Specialist will assist IWRMU (Senior Aquaculturalist) in supporting field DOF staff at subproject level and within PRA and NGO livelihoods support team (specifically fisheries facilitator) to guide development plans and identify relevant fisheries programs that can be promoted at the field level. The Fisheries Specialist will have an advanced degree in aquaculture (or related subject) with 8 years experience in fisheries development/extension and promotion. The consultant will have demonstrable experience of using appropriate computer software/programs. The specialist will undertake:

- (i) Coordination with DOF and assist with the preparation and delivery of effective and appropriate fisheries related extension services in subproject areas;
- (ii) Facilitate DOF in the preparation and delivery of training programs for WMCAs, coordinate delivery and monitor training;
- (iii) Assist IWRMU and DOF in identifying suitable aquaculture and fisheries management techniques for subproject water bodies;
- (iv) Advise IWRMU and consultants on the design of “fish friendly” structures and earthworks and check designs prior to finalization;
- (v) Ensure that PRAs and feasibility studies effectively identify individual commercial or subsistence fishers and that appropriate measures are taken to ensure the improvement of their pre-subproject livelihood;

- (vi) Provide capacity building support and supervisory services to field staff (LGED, DOF and fisheries facilitator from NGO livelihoods support team) and WMCAs for fisheries development activities. Undertake review of training material and update/modify in conjunction with Training and Media Specialist;
- (vii) Assist PIC Team Leader in review and modification (as required) of existing MOU between LGED and DOF for its support to the Project.
- (viii) Assist with the preparation of BME reporting for completed subprojects by providing information on annual fisheries and aquaculture harvests for both open water and ponds and for both capture and culture fisheries. with and without the subproject;

j. Rural Livelihoods Specialist (30 p-m)

33. The Rural Livelihoods Specialist (national) will have an advanced degree in microfinance/rural finance or related subjects and will report to the Deputy Team Leader and work alongside part of the IWRMU Social, and Gender and Development Section. The specialist will work in partnership with the Rural Livelihoods Advisor (international) who is to be directly funded by IFAD (from project start-up support funds provided by IFAD). Specific activities will include:

- (i) Work closely with the Rural Livelihoods Advisor⁸ (international) to review the current status of micro-finance activities of WMCA. In particular, with the help of district and upazila level LGED staff, expand the WMCA micro-finance rating system in the IFAD micro-finance study to cover all districts. Visit a selection of WMCA to verify ratings;
- (ii) Assist the Rural Livelihoods Advisor (international) in drawing up good practice guidelines for microfinance. In particular collect information on practices for community managed microfinance adopted by other agencies and programmes in Bangladesh and formulate lessons for PSSWRP from these programmes for subsequent implementation;
- (iii) Support capacity building for microfinance including advising IWRMU on specialist resources requirements, planning of course content, and monitoring of training delivery and training quality;
- (iv) Assist project management and interested WMCAs in establishing partnerships with micro finance institutions (MFIs), including identification of suitable MFIs, drawing up agreements between WMCAs and MFIs, negotiation of agreements and implementation of partnership programmes.
- (v) Where MFIs are working in partnership with WMCAs to provide microfinance services, monitor the results of this partnership and the performance of the MFIs.
- (vi) Work with project MIS and M&E staff to establish, as part of the MIS, a system for monitoring and reporting on WMCA microfinance activities and the access of WMCA members to microfinance services. Regularly visit a range of different types and ratings of sub-projects to verify MIS results and assess micro-finance activities and performance. Provide reports to the IWRMU on these visits including case studies of individual sub-projects.
- (vii) Assist the IWRMU team to support income generating activity options (as well as agriculture and fisheries) for WMCAs and their members with special regard to access to investment funds and development of the necessary skills.
- (viii) Maintain close contact with the overall microfinance sector and inform the project of developments in the sector.

k. Training Communication Specialist (45 p-m)

34. The Training and Communications Specialist will assist the PIC Team and IWRMU in project promotional, awareness and capacity building activities by assuming responsibility for project-related newsletters, training videos, promoting project specific plays and organizing training activities and training materials. The specialist will have a degree in communication or related discipline and will have at least 8 years experience in training management and developing training communication material in rural development programs. The consultant will have demonstrable experience of using appropriate computer, software/programs. Specific activities will include:

- (i) Assist IWRMU in designing and carrying out a national television, radio and newspaper campaign which explains the Project and creates awareness within rural communities on how to request Project assistance;
- (ii) Based on capacity development plan review (and further needs assessment) develop training program implementation and information dissemination strategy, associated budgets and draft terms of reference for individuals, NGOs, firms or institutes to be engaged to deliver training;
- (iii) In conjunction with other specialist staff develop promotional, extension and communication materials for WMCA capacity building;
- (iv) Coordinate and support implementation of project capacity building plan, liaise with partner line departments to ensure complimentary training program;
- (v) Support operationalizing regional training centres for use as suitable venues for project training activities;
- (vi) In consultation with IWRMU and PIC Team, develop a process for monitoring training activities, including recording trainees and evaluation of training – liaise closely with Participatory Development / M&E Specialist to ensure linkages, as appropriate, are made with the IWRMU MIS
- (vii) Contribute training related information for periodic and other project reporting;
- (viii) Assist IWRMU to regularly prepare and publish project bulletin;
- (ix) In conjunction with PIC Team Leader and IWRMU support dissemination of project information on regional and international forums through Global Water Partnership, Bangladesh Chapter and other knowledge hubs.

l. Operations and Maintenance Specialist (88 p-m)

35. The Operation and Maintenance (O&M) Specialist will have postgraduate qualifications in civil engineering or related subjects and have demonstrable field experience in O&M activities particularly on water resources/rural infrastructure development projects. The specialist will work closely with outputs from an earlier O&M Study⁹ and its subsequent operationalization through an O&M Strategy approved by LGED.

- (i) Based on the recommendations of O&M Study and subsequently developed O&M Strategy coordinate with LGED Additional Chief Engineer (IWRM), to modify existing guidelines and manuals for the practice of O&M by the WMCAs as well as the methods of training WMCAs in O&M;

⁹ The O&M Study was undertaken by ADB in May to September, 2008 and has been published as Supplementary Appendix H of the PSSWRP preparation – ADB TA 7041-BAN.

- (ii) Review existing LGED procedures for supervising subproject O&M and in close consultation with the Team Leader and the LGED Additional Chief Engineer (IWRM), modify these procedures taking into account the recommendations of the O&M Study/Strategy and institutional recommendations for small scale water resources development¹⁰ - with particular concern for the role of the LGED offices at circle and district levels;
- (iii) Review existing materials for O&M training of WMCAs and in conjunction with Training and Communications Specialist modify taking into account the findings of terms (i) and (ii), above. Similarly for LGED field staff and IWRMU O&M Section staff, prepare training program and suitable materials based on O&M Strategy;
- (iv) Undertake capacity building of LGED field, IWRMU (relevant) staff and O&M facilitators (provided through NGOs) to reorientate on O&M Strategy and activities/interventions under PSSWRP;
- (v) Facilitate IWRMU O&M Section in categorizing existing subprojects for performance enhancement activities and developing (in conjunction with PIC specialists) implementation program for strengthening activities;
- (vi) Assist LGED Upazila Engineers in developing subproject operation plans in conjunction with WMCAs and similarly for maintenance plans;
- (vii) Based on the recommendations of the O&M Study and in close consultation with Additional Chief Engineer (IWRM), other IWRMU staff and PIC Team Leader introduce improvements to arrangements for O&M cost recovery and fund collection;
- (viii) Based on the recommendations of the O&M Study redefine procedures for (a) the joint-management by LGED and the WMCAs of O&M funds collected prior to signature of the implementation agreement, (b) the replenishment of this fund, (c) the handing over of the fund to the WMCAs, and (d) the annual subproject “walk through” to establish O&M needs and priorities;
- (ix) Assist IWRMU O&M Section in (a) imparting on-the-job training to WMCAs and O&M sub-committees, (b) development of O&M training programs for LGED district and upazila level personnel, and (c) provision of necessary support to the completed subprojects of the Project and its previous phases.

m. Participatory Development / M&E Specialist (88 p-m)

36. The Participatory Development / M&E Specialist will work closely with IWRMU with greater interaction with SDGS and also PIC Institutional Development Specialists. The Participatory Development/M&E Specialist will have a postgraduate qualification in social sciences, development studies or other relevant subjects and will have 15 years demonstrable experience of implementing participatory, water resources projects. The specialist will work under the guidance of the Team Leader and the Project Director and will be responsible for:

- (i) Based on TA outputs and recommendations assist IWRMU in incorporating in participatory process for subproject identification, preparation, design, implementation and sustainable O&M;
- (ii) Advise and assist IWRMU in institutional strengthening of WMCAs and quality control of participatory subproject process, especially with respect to the

¹⁰ These institutional recommendations can be found in Supplementary Appendix B of the PSSWRP preparation – ADB TA 7041-BAN

- participatory rural assessments (PRAs), feasibility studies, implementation agreements, ownership agreements and the lease agreements;
- (iii) Provide technical advice and facilitate (in conjunction with Institutional Development Specialists) preparation and implementation of mitigation plans, gender and O&M strategies (including performance enhancement), social and environmental safeguard requirements in to the overall subproject development process;
 - (iv) Support Training and Media Specialist, other specialists and IWRMU staff in preparation of suitable awareness material, training modules, publicity materials and safeguards disclosure requirements. This may also include strategy for dissemination through local print, audio and visual media, workshops, seminars, as well as through local and international popular and scientific publications;
 - (v) Undertake capacity building of IWRMU staff, LGED staff at circle and district levels and externally recruited services through orientation/training programs and *on-the-job* activities;
 - (vi) Undertake ongoing review of PRA services and other social mobilization/institutional strengthening/livelihoods support activities to ensure stakeholder participation, capacity building of WMCAs and project impacts;
 - (vii) In conjunction with SGDS and PIC Sociologist/Poverty Specialist review ongoing (donor and other financed) initiatives involving labor contracting societies (LCS), PPTA recommendations and pilot options for improving LCS performance;
 - (viii) Assist IWRMU and PIC MIS/M&E Specialist in the ongoing development and reorientation/enhancement of project monitoring indicators and quality control mechanisms for implementation of project activities. Assist international MIS / M&E Specialist to review and strengthen (if required) framework for EME and BME, and reporting, in accordance with the requirements of ADB and the Government:
 - (ix) Assist IWRMU in supervising project BME and EME and support preparation of annual and mid-term project reports;
 - (x) Advise PIC Team Leader of suitable forum for promotion of project activities including regional and international seminars and workshops.

**n. Construction Monitoring and Quality Control Specialists
(4 persons, total 200 p-m)**

37. The Construction Monitoring and Quality Control Specialist will be a civil engineer with at least 5 years experience in construction supervision of civil works on participatory water resources development projects. The specialist will be based at district level and will spend at least 80% of time in the field. Specific responsibilities will include:

- (i) Monitor activities of the contractors that are engaged by LGED and report back to upazila engineer, PD, Additional Chief Engineer (IWRM) and PIC Team Leader on any quality/contract administration related issues;
- (ii) Assist in providing construction-related training to LCS and provide them with direct support for construction works that they undertake;
- (iii) Assist WMCAs to meaningfully monitor the construction activities of structural and earthworks;
- (iv) In conjunction with PIC specialists facilitate piloting of alternative options for implementation and payment of LCS works by providing field level support and monitoring;
- (v) Assist IWRMU and PIC specialists in providing O&M related training to the

WMCA.

o. Senior Institutional Development Specialist (88 p-m)

38. The Senior Institutional Development Specialist will have an advanced degree in sociology or other related social sciences and have at least 8 years experience on social/poverty aspects of participatory water resources projects. The specialist will work closely with IWRMU SAGDS and will lead the team of Institutional Development Specialists in their field activities. Specific activities will include:

- (i) Assist in identifying specific needs of poor and vulnerable groups including women, marginal farmers, landless people, fishers, indigenous people, or any minority group;
- (ii) Assist in improving social development and inclusiveness in participatory small scale water resources development activities by providing advice and supervisory support at critical stages of subproject development process;
- (iii) Support IWRMU and field team in implementation of capacity building plan particularly those activities relating to social/poverty/rural livelihoods support;
- (iv) Provide guidance and technical support for PRA and its analysis and processing of results to ensure subprojects are compliant with social selection criteria;
- (v) Support IWRMU in recruitment of PRA services for the proposed subprojects and any other relevant services and facilitate results analysis;
- (vi) Support needs assessment of beneficiary community and participate in gauging interest and attitudes towards subproject participation, specifically in O&M;
- (vii) Ensure subproject social and poverty selection criteria;
- (viii) Develop processes for resolving social conflict identified during the planning and implementation of subprojects and assist with implementing the process;
- (ix) Assist in preparation of training materials, awareness creation and capacity building of IWRMU staff on social and poverty issues and screening and selection of subprojects;
- (x) Facilitate IWRMU and lead field team in implementing Guidelines for Participatory Water Management and supervising implementation activities;
- (xi) Assist in implementation of “*on the job training*” for the staff of IWRMU, LGED at regional, district and upazila levels and partner agencies at all levels as appropriate; and
- (xii) Support IWRMU in improving subproject performance criteria and ensure appearance

p. Institutional Development Specialist (4 persons, total 200 p-m)

39. The Institutional Development Specialist will have a degree in any relevant discipline and at least 5 years experience in institutional/social development on water resources and/or rural development projects. The specialist will be based at district level and will spend at least 80% time in the field. The specialist will work closely with staff of the LGED district and sub district offices, community assistants and facilitators from rural livelihoods support team. Specific activities will include:

- (i) Support field staff in WMCA institutional development by facilitating (at field level) at each stage of the subproject development process;
- (ii) Oversee the functioning of the monitoring and quality control systems for institutional development at subproject level;

- (iii) Monitor the first three stages of the four stage subproject development cycle of each subproject, with special reference to (a) the PRA study, (b) the formation of the WMCA and its Management Committee, (c) the formal implementation agreement between the WMCA and LGED, (d) the mitigation plan on the compensation of affected people, (e) the O&M plan, and (f) the quality of the construction works including earthworks by LCS and small structures by contract;
- (iv) Provide support to LCS formation, organizational strengthening and facilitate implementation and pursue payment of earthworks. Also, sign off on the implementation agreement ensuring that all preceding stages have been properly and systematically followed in accordance with the defined process;
- (v) Provide field level training support as required by PIC Team for PRA team, NGOs and community assistants engaged in WMCA support activities;
- (vi) Contribute to subproject level institutional development related information, as requested, for the preparation periodic and milestone reports; and
- (vii) Provide field level support and feedback to Senior Institutional Development Specialist and IWRMU staff.

C. Project Reporting Requirements

40. The PIC will assist the IWRMU Implementation Section to prepare and submit Quarterly Progress Reports to ADB, through Additional Chief Engineer (IWRM) and LGED Chief Engineer. An Inception Report and a Mid Term Report report will be prepared and submitted to both ADB and LGED three months, and four years after project inception, respectively. A draft Project Completion Report will be submitted to ADB three months before project completion. Final report including ADB and Government of Bangladesh comments will be provided within 3 months of project completion.

- Inception Report (3 months after loan inception)
- Mid-term Report (4 years after loan inception)
- Specific Study Reports (submission dates are indicative)
 - MIS database reorientation and updating (6 months after loan inception)
 - PRA Analysis Reports for Yr 1 Subprojects (8 months after loan inception)
 - Feasibility Study Reports for Yr 1 Subprojects (12 months after loan inception)
- Project Completion Report (draft submitted 3 months prior to program completion and finalized within 3 months after project completion)