

Integrated Natural Resources and Environmental Management Project

Consulting Services for Project Implementation and Management (ADB) Terms of Reference for ADB funded Consulting Services (Firm)

I. BACKGROUND (AND RATIONALE)

1. The Integrated Natural Resources and Environmental Management (INREM)¹ Project (hereinafter referred to as Project) will address unsustainable watershed management in four priority river basins: (i) the Chico River Basin in the Cordillera Administrative Region (CAR), Northern Luzon; (ii) the Wahig–Inabanga River Basin on the island of Bohol in Region 7; (iii) the Lake Lanao Basin in the province of Lanao del Sur in the Autonomous Region of Muslim Mindanao (ARMM); and (iv) the Upper Bukidnon River Basin in Bukidnon and Misamis Oriental provinces in Northern Mindanao (Region 10). With particular focus on indigenous peoples (IPs) and resource-poor communities, the project will reduce and reverse degradation of watersheds and associated environmental services caused by forest denudation and unsustainable farming practices.
2. It will also provide incentives to local communities, local government units (LGUs), and the Department of Environment and Natural Resources (DENR) for improving natural resource management by generating sufficient and tangible economic benefits. Mechanisms to achieve these project objectives include (i) payments for environmental services (PES) including water regulation, soil conservation, carbon offsets, and biodiversity; (ii) income generation from sustainable use and management and value-added processing of timber and non-timber forest products; (iii) improved natural resource productivity; and (iv) improved climate resilience in project watersheds.
3. The Project impact will be improved condition of watersheds generating livelihood benefits in the four Upper River Basins (URBs). The project outcome will be increased rural household incomes and LGU revenues in selected watersheds in the four URBs.
4. The Project has four (4) components which correspond to outputs consolidated based on extensive consultations with stakeholders and beneficiaries. The components are the following:
 - i. **Component 1: River basin and watershed management and investment planning.** Indicative development plans (IDPs) will be developed for the four URBs to be adopted by regional development councils and/or provincial legislative councils. IDPs will be based on land capability assessments and participatory land use classification to identify appropriate management zones, and will be drawn up by the regional and provincial offices of the DENR in coordination with national agencies and LGUs.² Watershed management plans (WMPs) will be prepared for the selected watersheds based on the IDPs. The WMPs will define and prioritize subprojects and establish a work program for implementation by LGU clusters and municipal development councils. The WMPs will take account of existing³ tenurial arrangements and treat ancestral domains as management subunits. A geographical information system (GIS) based database for performance monitoring will be established.

¹ ADB. 2009. *Technical Assistance to the Republic of the Philippines for the Integrated Natural Resources and Environmental Management Project*. Manila. (TA 7109-PHI).

² Integrated ecosystem management will be made operational within the priority watershed by assimilating science-based land management regimes with local indigenous knowledge and practices.

³ As defined in the Indigenous Peoples Right Act, 1997.

- ii. **Component 2: Smallholder and institutional investments in forest protection and conservation, reforestation, rehabilitation and improvement of rural infrastructure.** Subproject investments will be undertaken within the 23 project watersheds based on outputs from river basin-wide planning (output 1). Interventions for watershed restoration and rehabilitation covering more than 325,590 ha will be implemented by the DENR to include community-based protection, reforestation and/or assisted natural regeneration, production forestry including demonstrations on agroforestry and commercial plantations, and conservation farming. Livelihood improvement investments to be undertaken by municipal LGUs include (i) 645 kilometers of rural access roads and foot trails; (ii) communal irrigation systems servicing 3,040 ha; (iii) 275 units of potable community water facilities; (iv) a provincial trading and processing center supporting farming communities; and (v) seed funds for replication and/or expansion of tested and mature farming technologies.
- iii. **Component 3: Strengthening of river basin and watershed management capacity and related governance mechanisms.** The project will (i) assist LGUs to establish operational clusters at watershed and river basin levels; (ii) train LGUs and local community organizations on land resource assessments, land use planning, and watershed management and monitoring; (iii) provide support for technical extension-information, education and communication (TE-IEC); (iv) capacitate LGUs in carbon stock enhancement and land management practices to reduce carbon dioxide emissions and land-based pollution, and (v) support the establishment of community watershed protection brigades.
- iv. **Component 4: Project management and support services.** The project will support the establishment of a national project coordination office (NPCO), regional project coordinating offices (RPCO), provincial project management offices (PPMO) and watershed management and project coordination offices (WMPCO) at the DENR. The NPCO will (i) coordinate consultant recruitment and supervision; (ii) conduct procurement of materials, equipment, and vehicles during project implementation; (iii) operationalize the project monitoring and evaluation system; (iv) mobilize resources for capacity building of DENR's regional and provincial units and the LGUs; (v) consolidate the annual program and budgets received from provincial and regional levels; and (vi) conduct gender and safeguard monitoring and reporting.

5. The project will be financed from proceeds of loans from ADB and IFAD, grants from Climate Change Fund (CCF) and Global Environmental Facility (GEF), and financial contributions from national and local governments. The beneficiaries as well as the government, national and local, will provide in-kind contributions in the form of labor, use of office space/facilities, time of personnel and staff assigned to the project and participation of the officers and technical staff in the implementation and management of Project.

6. Procurement of consulting services will be separate for each fund source. However, the Consultants, whether hired individually or through a firm from whichever fund, shall coordinate with the each other and with NPCO and its Field Offices as prescribed in the Project's implementation arrangements for synchronized and cohesive efforts in performing the specified tasks in their respective Terms of Reference and as described in pertinent Project documents, including the Project Administration Manual (PAM).

II. OBJECTIVES OF THE SERVICES

- 7. The objectives of the consulting services are to provide management and technical

assistance to DENR, the Project's Executing Agency (EA), through the NPCO and the Project's field offices: namely, the RPCOs, PPMOs and the WMPCOs, in the implementation of the Project and strengthen technical capacities of these offices and those in the participating local government units (LGUs) on watershed management.

III. SCOPE OF PROJECT IMPLEMENTATION AND MANAGEMENT

CONSULTING (PIMC) SERVICES⁴

8. The scope of work will include, but not limited to the following tasks⁵:

- (i) Assist in the preparation of INREM Indicative Development Plans for each of the selected river basins, Watershed Management Plans for each watershed and associated subproject level feasibility studies, including environmental and social safeguards documents to be approved for financing under the Project;
- (ii) Assist in the review of satellite and remote sensing data, if available; and provide guidance to URB consultants and field staff in data verification process or ground truthing of satellite and remote sensing data, if necessary;
- (iii) Assist and/or provide guidance to Project staff at the NPCO, RPCOs, PPMOs and WMPCOs in the gathering and processing of baseline data, and in undertaking community participatory mapping of current and proposed land uses/classification within the selected river basins and in the particular watersheds;
- (iv) Prepare, with the participation of the Project staff and concerned stakeholders or through qualified service providers, detailed vulnerability maps and adaptation assessment plans, land capability and land suitability analysis, zoning and delineation on maps of the four selected river basins;
- (v) Develop, recommend and participate in the implementation of strategies (i.e., social marketing) to ensure project sustainability by getting the commitment and eventually institutionalizing the inclusive participation of the local governments, communities, Indigenous Peoples' Organizations (IPOs), peoples organizations (POs), civil society organizations (CSOs), private organizations, land owners, and other stakeholders in the preparation/updating as well as implementation of the URB and watershed management and investment plans;
- (vi) Provide management and technical assistance to NPCO, and RPCOs/PPMOs/WPMCOs in the preparation the URB indicative development plans (that will be adopted by concerned Regional Development Councils (RDCs) and/or Provincial Development Councils) and in coordinating the participatory preparation of the watershed management plans and investment plans that will be adopted by the watershed management councils, taking into account existing tenurial arrangements and treating ancestral domains as management subunits, REDD and climate change adaptation activities and environmental and social safeguards that should be included;
- (vii) Determine the data elements, specifications and standards; design the GIS based database for project performance monitoring; supervise development; and, ensure the proper installation and operation of the GIS-based monitoring and evaluation;
- (viii) Provide management and technical support in the preparation and/or assessment of the feasibility studies for subprojects under Component 2;

⁴ PIMC Services include consulting services funded by ADB, GEF and CCF

⁵ Refer to the PAM for the background and/or elaboration of the enumerated tasks.

Smallholder and institutional investments in conservation increased and URB productivity enhanced in the forestry, agriculture and rural sectors and ensure that REDD+, climate change adaptation activities, as well as the environmental and social safeguards are included.

- (ix) Define the specifications for the conduct carbon stock baseline survey, determine and recommend specific REDD and climate change adaptation activities that should be incorporated in the Project's subproject investments;
- (x) Develop a capability building program for the identified poor in the river basin through demonstrations of selected conservation farming technologies as alternative livelihoods that are consistent with URB/WS management and investment plans, that are appropriate considering the URB/WS's unique geophysical, social and economic characteristics, and that will ensure sustainability of project benefits; and, assist the RPCOs/PPMOs/WMPCOs implement the approved programs by supervising establishment of demonstration farms and conducting training of beneficiaries through qualified institutions, NGOs or other implementing partners;
- (xi) Develop and conduct training courses and provide on-the-job training to Project and LGU staff on the particular areas of concern indicated in Component 3 and detailed in the schedule of implementation and as may be determined during Project Implementation;
- (xii) Assist the LGUs to: (a) establish clusters at watershed and river basin levels, (b) adopt the URB and WS management and investment plans into their own land use plans and investment plans, (c) adopt and legislate related local policies to institutionalize participation in watershed management planning and its implementation including the zoning of the approved land uses and other instruments to ensure sustainability such as the Payment for Environmental Services (PES), Reducing Emission from Deforestation and Forest Degradation (REDD), conservation and protection by IPOs/POs, (d) establish community watershed protection brigades, etc.;
- (xiii) Review relevant national policies and recommend adjustments as may be needed to institutionalize or enable arrangements that are proven to be effective or necessary in managing river basins/ watersheds during Project implementation (which may include tenurial and management arrangements).
- (xiv) Develop and recommend mechanisms to provide incentives to stakeholders and implementing partners to ensure sustainability of the project, including but not limited to (i) the use of "block grant" for forest conservation and protection by the community, (ii) providing funding support for the upscaling of successful/matured conservation farming technologies, and (iii) the Performance Based Grant to the LGUs for adopting INREMP approach to watershed management;
- (xv) Provide assistance to M&E staff of Project Offices and LGUs in the conduct of monitoring and reporting project performance and results including the physical progress and accomplishments of the approved/ funded subprojects;
- (xvi) Ensure that environmental and social safeguards monitoring and reporting are complied with;
- (xvii) Develop information-education-communication materials for the introduction and promotion of the INREMP to the local stakeholders; manuals, hand-outs on project operations, land use assessment and zoning; criteria and procedures for availing funds for subprojects by proponent-implementing partners; GIS based project performance monitoring; community participation

in forest conservation and protection; conservation farming technologies/technical extension and other materials indicated in the communication plan presented in the PAM and as may be further determined during implementation;

- (xviii) Assist in undertaking and conduct training on mediation and conflict resolution;
- (xix) Assist in the preparation of the specifications, terms of reference for contract packages for procurement whether through national competitive bidding, shopping or community participation works;
- (xx) Prepare periodic and final project reports; technical and specific reports required per area of specialization/concern; and,
- (xxi) Provide related management and technical assistance as may be requested.

IV. THE CONSULTANT

9. The Project Implementation and Management Consulting Services (PIMC-ADB) will be provided by an international consulting firm deploying specialists with sufficient pertinent local experience (i.e., experience at the particular region/province where they will be assigned) or a consortium of an international and local firm(s) fielding specialists with sufficient pertinent local experience. The PIMC-ADB will render up to 482 person-months (PM) over a period of 5 years. It will include around 27 person-months of International Consultant, 434 person-months of national consultants. Around 163 person-months will be based at the NPCO supporting all Project offices, and around 301 person-months based at the four (4) upper river basins supporting the assigned URB Project offices.

10. Specialists who will be deployed in each of the four (4) URBs must at least have the minimum required experience in related fields of expertise/specializations, preferably with each specialist having knowledge of local dialect and local experience, such that they, as a group and on their own, will be able to provide the necessary management and technical support to the URB's Field offices to effectively implement the Project.

11. The breakdown of the consulting services by specialist, NPCO/Central Office and URB assignment and estimated deployment over the 5-year period are presented in VI. Staffing. The firm can propose only one expert per position.

V. IMPLEMENTATION ARRANGEMENTS

12. The NPCO will lead and oversee the implementation of the Project. The NPCO shall be supported in the field by the RPCO, PPMO and MPCOs at each of the selected river basins. The PIMC (ADB, GEF & CCF) will provide management and technical assistance directly to the NPCO, which is based at the FMB-DENR Central Office and to the Project field offices at the river basins, which will be based either at the DENR regional or provincial offices where the selected URBs are located. Consultants based at the Central Office will also provide assistance to the Field Offices on their particular areas of specialization. Consultants based at the URBs will coordinate with the consultants at the Central office for consistent approach and methodologies to implementation at all Project sites. The Team Leader/Project Management Advisor (TL/PMA) of PIMC-ADB shall work and coordinate closely with the other consultants hired individually including those hired for the GEF and CCF components. He shall ensure that all consultants, wherever based and whether provided by the lead or local partner consulting firm(s), will be consistent and unified in providing management and technical assistance to all Project Offices.

13. In case of consortium PIMC-ADB, official communications and arrangements will be made only with the Lead Consulting Firm's authorized representative, who shall be responsible for its partner firms' delivery of required services. The DENR-NPCO shall not be expected to communicate or deal with any firm other than the Lead Consulting Firm. However,

this will not prevent the DENR to require the consortium to submit copy of their sub-contracting agreements/arrangements and require amendments thereto if deemed necessary to facilitate timely delivery of quality management and technical services.

14. NPCO and the Project field offices will be composed of FMB-DENR personnel detailed on full-time basis to the Project, Project hired assisting professionals, technical and administrative staff at NPCO, and Project hired technical and extension staff at the field offices. The Project staff and assigned regular staff at concerned Offices at the DENR & FMB will provide the administrative, financial and procurement requirements of the Project.

VI. STAFFING

15. The staffing presented below are indicative based on over-all implementation schedule presented in the PAM. Actual need for services of particular specialists will depend on the strategies, methods as well as on their own effectiveness in delivering the required outputs/results. The Consultant (PIMC-ADB) may propose different staffing as long as the basic requirement for management and technical assistance to the NPCO and URB Field Offices are provided as intended or indicated in the staffing below. The proposal should clearly present how this will be done. Hence, proposal shall be evaluated not only in terms of the strategies and methodologies that will be adopted in managing the implementation of the Project but also in the completeness of the skills, expertise and local knowledge of the specialists to undertake such proposed strategies and methodologies in each of the selected URBs.

VII. REPORTS, DELIVERABLES AND TIMETABLE

16. The PIMC-ADB, together with consultants funded by GEF and CCF, under the direction and supervision of the TL/ PMA, PIMC-ADB, shall deliver the following reports and outputs:

No.	Report or Deliverable⁶
1.0	Inception report
2.0	Specifications or terms of reference (TORs) prepared for the procurement and/or undertaking of the following: a) Hardware and software for the development and operation of
2.1	INREMP's GIS-based database for project performance and results monitoring and evaluation (M&E) and decision support system (DSS); b) Survey of baseline data for project results and impact monitoring (RIMS) per Design and Monitoring Framework (DMF) and as
2.2	required by the social, gender, IP and environmental safeguards, with recommendation on whether it should be outsourced or undertaken by the Project field offices.

⁶ Indicative quantities of the outputs or deliverables are found in PAM, Overall Implementation Plan.

⁷ Range/period is for delivery of reports/outputs per WS, URB, LGU, office or training course, etc. as they are completed within the given period.

No.	Report or Deliverable ⁶
2.3	c) Detailed assessments of land suitability, vulnerability and adaptation to climate change of the selected URBs (4). These assessments will be among the bases for URBs' indicative management zones and/or watershed management zoning as well as recommendations for policy adjustments, if necessary.
2.4	d) Carbon stock baseline survey
2.5	e) Feasibility study on the establishment of charcoal retort with the private sector
3.0	<p>Maps and reports on the Project's baseline information for the selected URBs/watersheds, including but not limited to the following: physical, natural and biological resources (including critical areas for biodiversity conservation), hydro-meteorological (including drainage and hydrological vulnerabilities), environmental, socio-economic and cultural (population, settlements, location of indigenous peoples), current land classification and uses, including existing claims and tenorial instruments issued within the URBs (based on satellite data/maps, ground truthing, tenorial instruments, legal and administrative issuances, etc.).</p> <p>Standards and protocols for presenting spatial data (consistent</p>
3.1	with international/national standards and practices) and non-spatial information for uniform output format by the various offices of the Project.
3.2	Reports on on-the job training on mapping conducted including the profiles of the persons trained.
4.0	<p>INREMP Database for Project performance monitoring and decision support system for the Project developed. It will include among other: data structure, standards, specifications and protocols for processing, i.e., data gathering, inputting, filing/storing, including backup and safekeeping procedures, access and functionalities at the various nodes or levels, quality control and retrieval, i.e., map and report generation for GIS or spatial and non-spatial data including but not limited to the natural and biodiversity resources, geo-tagging or referencing results of baseline surveys, special studies, physical accomplishments of the investments/sub- projects.</p> <p>User's and operator's manuals - for all processes involving the</p>
4.1	INREMP database, i.e., input, processing/storage (backup procedures), retrieval -various map/report generation at various levels.
4.2	<p>Systems documentation of INREMP database including data structure, specifications, systems and process flowcharts, automated functionalities, and other documentations.</p> <p>Training modules on the use and operation of GIS database for the</p>
4.3	Project performance, results and impact monitoring & evaluation and decision support system, including data build-up, update, backup, operation or use at various levels and processes, etc.
4.4	Report on the training on GIS database operation, including the profiles of the persons trained.
5.0	Land capability analysis (LCA) and land use assessments (LUA) and management plans undertaken for the selected URBs and

No.	Report or Deliverable ⁶
	watersheds
5.1	Documentation of or guide on the application of INREMP methodology for LCA and LUA and land use modeling using GIS for management zoning to guide field offices' staff and extension workers.
	Manuals and/or instructional and training materials, and training modules (for field extension and local/LGU staff) on the following:
5.2	<ul style="list-style-type: none"> • Community mapping • Participatory LCA and LUA • Participatory management zoning of the URB/watershed • Social assessment, and • Assistance for IP planning
5.3	Reports on training conducted on community mapping; participatory LCA, LUA and management planning; social assessment; and assistance to IP planning, including the profile of the persons trained.
	Guidelines, including standards or criteria, to guide the LGUs and/or Watershed Management Council (WMCs) in the:
5.4	<ul style="list-style-type: none"> • Preparation of participatory URB IDPs and WMPs • Review, approval or adoption of the WMP and investment plans; and, • Review, assessment and approval of subprojects based on feasibility studies.
5.5	Reports and guidelines on specific features and activities that should be incorporated in the URB IDPs and WMPs and investment plans as well as in feasibility studies for sub-projects to address vulnerability, climate change adaptation, biodiversity conservation, tenurial arrangements, gender, social, IP and environmental safeguards in each of the selected URBs.
5.6	Maps and reports on the participatory LCAs and LUAs and management zoning of the URBs (4) and watershed (23) conducted
5.7	URB IDPs (4) reviewed, finalized and adopted by the concerned LGUs (province)/WMCs.
5.8	Participatory WMPs and investment plans (23) reviewed, finalized and adopted by the concerned LGUs and WMCs
5.9	Report(s) on the assistance provided to IPs within the WS/URBs for formulation or enhancement of their Ancestral Domain Sustainable Development and Protection Plans (ADSDPP) and other support provided; and, the ADSDPPs enhanced or prepared. Report on the carbon stock assessments implemented
5.10	in the four river basins
5.11	Reports and maps on the scoping, identification and social assessment of stakeholders, beneficiaries and potential partner – implementors for the main components of the Project in each of the URBs.
6.0	Maps and technical descriptions delineating forest boundaries and/or conservation and protected areas within the selected URBs based on URB IDPs and WS management zoning (to guide on-the-ground-demarcation).
6.1	Draft TOR and specifications for contracting the demarcation of

No.	Report or Deliverable ⁶
	forest boundaries and/or conservation and protected areas within each of the selected URBs (or watersheds as deemed appropriate).
7.0	Reports and IEC materials on approved/adopted strategies in presenting and packaging the Project components to stakeholders (LGUs, POs, IPs and communities) to ensure inclusive and sustained participation in the preparation and implementation of WS management and investment plans in the selected URBs
7.1	Innovative financing mechanisms to provide incentives to stakeholders and beneficiary-implementing partners to ensure effective implementation of the subprojects and sustainability of the Project formulated, consulted with concerned stakeholders and approved by the Project Steering Committee
7.2	INREMP Performance-Based Grant (PBG) System for the active and sustained implementation of watershed management by the participating LGUs approved and adopted by the Municipal Development Fund Office (MDFO) PBG Steering Committee.
7.3	Guidelines, criteria and procedures for the participation of the LGUs in the implementation of the Project Final draft of IEC materials on approved strategy/ies in
7.4	presenting/packaging INREMP investment components to encourage all stakeholders' (LGUs', POs and IPs) early and sustained participation.
8.0	Reports on meetings, Project orientations, consultations and/or workshops conducted with the LGUs, IPs, POs and other stakeholders (include in periodic progress reports) Reports on the LGUs clustered and/or signifying willingness and
8.1	commitment to participate in the implementation of the project, including the approved/adopted local council resolutions on such commitment (9 provinces & 81 municipalities) Reports on LGUs adopting INREMP related policies including the resolutions/approved local legislations. (9 provinces & 81
8.2	municipalities), including the approved local resolutions/ legislations. Reports on local legislative studies/activities and consultations undertaken to ensure sustainability of LGUs' practice of participatory WS management planning, including draft (template) local legislations adopting: <ul style="list-style-type: none"> • The Project's URB IDPs and WMP and investment plans and incorporating them in their own local development and investment plans and zoning of recommended/approved land uses
8.3	<ul style="list-style-type: none"> • Local policies institutionalizing the regular undertaking of participatory watershed management planning and its implementation; • Policies enabling the conservation and protection of the forest/protected areas by the communities (IPs /POs), including the creation of community watershed protection brigades and provision of support to their activities; • Other instruments/issuances to ensure sustainability such as the Payment for Environmental Services (PES),

No.	Report or Deliverable ⁶
	Reducing Emission from Deforestation and Forest Degradation (REDD); etc.
8.4	Reports on training on PES, REDD, land use, land use change and forestry (LULUCF) conducted; including the training materials and modules developed as well as the profiles of the persons trained.
9.0	Reports on the undertaking of the forestry and infrastructure subprojects under Component 2
9.1	Draft or template contracts or memoranda of agreements (MOAs) between EA and beneficiary-implementing partner to undertake specific subproject(s) under Component 2 (conservation and protection, reforestation, assisted natural regeneration, agro-forestry, demonstration commercial plantation, conservation farming, and sustainable forest management) prepared, reviewed and approved by the NPCO and/or Steering Committee (SC)
9.2	Draft or template MOAs between MDFO and LGU for undertaking of infrastructure subproject prepared, reviewed and approved by the NPCO/SC
9.3	Reports on feasibility studies on agro-forestry and demonstration commercial plantation subprojects prepared or reviewed; and assessed by the WMC and PPMO/NPCO. (include in the periodic progress reports)
9.4	Guidelines and criteria for the assessment and selection of beneficiaries and/or implementing partners for forestry sub-projects to guide Project field offices and the WMCs approved by NPCO/SC.
9.5	Reports on the assessment and selection of beneficiaries and/or implementing partners for the forestry sub-projects undertaken by the project field offices/WMCs. (include in the periodic progress reports)
9.6	Reports on the contracts or MOAs executed for the undertaking of forestry sub projects (include in the periodic progress reports) Localized instructional materials or manuals for INREMP implementing partner-communities per URB on "how-to" for the following :
9.7	<ul style="list-style-type: none"> • Sustainable forest management • Conservation and protection by the community (brigades) • Reforestation • Assisted natural regeneration (ANR) • Agro-forestry • Community plantation (demo)
9.8	Reports on the training and demonstrations conducted for the implementing partners on the forestry subprojects, including the profiles of the persons trained and demo areas.
9.9	Reports on training on revolving fund and financial management of revolving funds for POs/IPOs, including set training modules and materials and profiles of the POs/IPOs and of the members trained.
9.10	Reports on the assistance provided to LGUs in identifying and preparing feasibility studies for the rural infrastructure subprojects that may be funded under the Project;
9.11	Reports on the assistance provided to PPMO/WMC in assessing/ evaluating feasibility studies for rural infrastructures to be

No.	Report or Deliverable ⁶
	undertaken by the LGUs. (include in the periodic progress reports)
	MOAs executed between the LGU and MDFO for the undertaking
9.12	of approved infrastructure sub-projects within the URB/WS. (include in the periodic progress reports)
	Reports on training of LGU staff and community members on the
9.13	maintenance of completed rural infrastructures conducted,
	including the training materials and modules developed and
	the profiles of the persons trained.
10.0	Conservation farming and livelihood support (Component 2)
	Recommended combination of trees and crops to be planted and
	other activities to support livelihood of beneficiary-communities,
	including the appropriate conservation farming technologies, based
10.1	on the IDPs/WMPs or more specifically on the land
	suitability/capability assessments, climate adaptation
	assessment/plans and marketing studies for the
	particular URB/WS. (Local offices of DA, DTI and DOST
	should be consulted)
	Guidelines and criteria for the identification and selection of
10.2	beneficiary-communities of the livelihood support that will be
	provided under the project for the guidance of the Project field-
	offices and WMC approved the NPCO/SC.
	Reports on the beneficiary-communities selected for the livelihood
	support thru conservation farming, including their profile and
	baseline information, identification and assessment process
10.3	undertaken and the corresponding recommended livelihood
	activities. (Livelihood support plan per beneficiary community
	prepared with community participation and consistent with
	overall strategy of implementation)
	TORs for the undertaking of the conservation farming and livelihood
	support for each URB or watershed, as may be deemed
10.4	appropriate and approved, by locally based service providers,
	which may be the academe, local colleges/universities, NGOs,
	private organizations.
	Reports on the monitoring of the performance of each of the
10.5	service providers contracted for the undertaking of the livelihood
	support thru conservation farming in the selected URB/WS.
	IEC and training materials on the conservation farming
10.6	technologies recommended for the URBs/WSs prepared.
	Reports on training courses conducted for trainers, LGU extension
	workers, Project Field staff (technical extension staff) and other
10.7	prospective trainers on the conservation technologies and
	livelihood support activities, including the profiles of the
	persons trained.
11.0	Assistance to project management and capacity building provided
	Assessment of training needs (TNA) made of the concerned offices
	and units at the EA and the participating LGUs to effectively
	implement the Project in the selected URBs, such as project
11.1	planning and budgeting, project disbursements and procurement,
	project monitoring and evaluation, mediation and conflict resolution,
	as well as the need to ensure that the safeguards on gender, social,
	IP, environmental and resettlement are complied

No. Report or Deliverable⁶ with, and others.

- 11.2 Reports on the training courses conducted to address the needs indicated in the TNA, including the training modules, materials and profiles of the persons trained
- 11.3 IEC and technical extension materials developed to support Project implementation and strengthen related extension work of the LGUs/WMCs.
- 11.4 Reports on the assessments made on the subprojects' compliance with the applicable safeguards: social, IP, gender, environmental and resettlement.
- 11.5 Reports on internal monitoring activities on safeguards, i.e., social, IP, gender, environmental and resettlement, if required.
- 11.6 Reports on the assistance provided in enhancing implementation arrangements among all the entities (units within the EA and other government agencies and offices, consulting firms, LGUs, beneficiaries and implementing partners, etc.) involved, including the relevant manuals of operations prepared to document such arrangements and guide all concerned, such as Manuals of fund management, disbursement, procurement, M&E, etc.
- 11.7 Regular periodic progress reports as agreed upon with the NPCO/SC
- 11.8 Project completion report/ final report
- 11.9 Other reports that may be requested by the EA/NPCO and ADB

VIII. DATA, LOCAL SERVICES, PERSONNEL, AND FACILITIES TO BE PROVIDED BY THE EXECUTING AGENCY

17. The DENR through the NPCO will provide the PIMC all maps and data on the selected river basins, relevant policies, and other pertinent information that are available at DENR, FMB, field offices and attached agencies.

18. The PIMC will be provided office spaces with furniture and fixture, basic office equipment such as production machine, communications and utilities, at the NPCO and RPCO or PPMO where the field consultants will be based. Personal computers, lap tops, notebooks or other computing facilities needed by the consultants to operate will be provided by the consulting firm or consultants. Any equipment purchased by the Consultants that is charged directly to the Project will be turned over to NPCO at the end of the engagement.

IX. CONSULTANT'S TERMS OF REFERENCE (TOR)

1. Team Leader/Project Management Advisor, Natural Resources, Forest and Biodiversity Management Specialist

19. The Team Leader (TL)/Project Management Advisor will in close cooperation with the National Project Director and the ADB Project Officer (PMA) lead the consulting team in providing management and technical assistance to the NPCO and its field offices to achieve the Project objectives during implementation. Specifically, the TL/PMA will manage and orchestrate the services of each and every specialist of his/her team and coordinate with the other consulting teams (GEF & CCF) to effectively assist the EA manage the implementation the project, resulting in the achievement of both physical and financial disbursement targets

as stipulated in the Report and Recommendation of the President (RRP) and PAM. The consultant will review the Project related documentation, including the PAM, to better understand the Integrated Natural Resources and Environmental Management implications of proposed investments under the Project.

20. The TL/PMA will be responsible for the following specific tasks during implementation, with the assistance of other team members and other consulting teams, as appropriate:

- (i) Assume overall responsibility for technical support during implementation, including preparation and implementation of work plans
- (ii) Coordinate financial management, including submission of SOE reports and ensure timely deployment of consultants
- (iii) Monitor progress against project implementation schedule and collate and coordinate preparation and submission of periodic progress reports and technical reports on project findings
- (iv) Organize and oversee timely implementation of land use and land capability assessment component, and associated analyses and assessments, as stipulated in the RRP and detailed in PAM and other linked documents in the ADB web page.
- (v) Oversee collection and analysis of the agro-ecological condition of selected priority watersheds in selected river basins that impact its ecological functions, including an assessment of current land use patterns and determination of appropriateness of existing land use patterns.
- (vi) Oversee socioeconomic analysis of potential beneficiaries, with special reference to poor and vulnerable, and indigenous people.
- (vii) Ensure proper documentation of social, technical, policy, legislative and institutional constraints that must be addressed to ensure restoration of ecological functions of the selected watersheds.
- (viii) Organize stakeholder workshops at the national, provincial, and local government levels to present the data on land use and land capability assessments and other social and environmental data and present options for investments to be included in the management plan;
- (ix) Oversee associated assessments in social, environment (including potential climate change impacts), institutional, and policy aspects to be undertaken by other members of the team with a view to generate adequate and appropriate data for preparation of management plans for the watersheds within the selected river basin with particular focus on traditional sustainable development management practices in line with the needs and aspirations of the indigenous population;
- (x) Based on a thorough review of lessons learned in natural resources, and environmental management of watersheds, design an appropriate monitoring and evaluation framework for monitoring progress and performance of the Project in accordance with ADB Guidelines and documentation provided as part of the RRP;
- (xi) Organize and guide the Strategic Environmental Assessment (SEA) of the management plans prepared for the watersheds in each river basin and ensure that climate change considerations are embedded in the SEA for the management plan;
- (xii) Finalize the Management Plans for the watersheds in each of the selected river basins;
- (xiii) Ensure that the management plans include investment options for natural resources conservation, rehabilitation and management of selected watersheds within the selected river basins, identifying various investment packages and their climate change risks and mitigation under each option together with indigenous Peoples' Development Plan (if applicable), Involuntary Resettlement Plan (if applicable), Institutional capacity building plan, cost estimates for investments, financing options (including options for grant financing under various global

conservation/environmental funds (GEF/CDM/Others), economic and financial analysis, and policy adjustments indicating milestones for compliance and benchmarks for monitoring;

- (xiv) Provide the guidance to the consultants' team in the preparation of the feasibility study for integrated natural resources and environmental management (INREM) investment program, encompassing appropriate investments and associated policy adjustments to ensure appropriate levels of conservation, rehabilitation, and management of selected critical watersheds of priority river basins;
- (xv) Oversee organization and conduct of training workshops for raising environmental awareness and environmental management at the LGU level (provincial and municipality); and
- (xvi) Oversee the organization and conduct of river basin level stakeholder workshops.

21. In undertaking these tasks/activities, the TL will work with the NPCO and other consulting teams (GEF & CCF), coordinate closely with concerned government agencies, development partners and other stakeholders' groups, particularly in the preparation of the management plans; and update the ADB, concerned national government agencies and other development partners of the progress of work through periodic reports and regular meetings and submit periodic progress reports that the ADB and the EA will require.

22. Minimum Preferred Qualification. The TL/PMA must have at least 15 years of work experience; at least 5 years in managing projects funded by Multilateral Donor Institutions (e.g. WB or ADB). Project management experience in the Philippines will be an advantage. He must at least have graduate and post graduate degrees in natural sciences such forestry or biology and fluent in spoken and written English. He/she have good understanding of the ADB disbursement and procurement procedures.

2. Deputy Team Leader (DTL)/Deputy Project Management Advisor (DPMA), Natural Resources, Forest and Biodiversity Management Specialist

23. The Deputy Team Leader will in close cooperation with the TL and the National Project Director direct and supervise the URB consulting team in providing management and technical assistance to the RPCO, PPMO and WMPCO for the achievement of the Project objectives during implementation in coordination with NPCO/TL and other concerned Specialists based at the NPCO. Specifically, the DTL will manage and orchestrate the services of each and every specialist of the URB Team and coordinate with other consultants (ADB, GEF & CCF) to effectively assist the Project Field Offices in the implementation of the Project in the assigned URB, resulting in the achievement of both physical and financial disbursement targets as stipulated in the RRP/PAM. The consultant will review the Project related documentation, including the PAM, to better understand the Integrated Natural Resources and Environmental Management implications of proposed investments under the Project.

24. The DTL/DPMA will be responsible for the following specific tasks in the assigned URB, with the support of other URB team members and Project Field Staff, in coordination with RPCO/PPMO and following the methodologies and approaches adopted or specified by the NPCO/TL, as appropriate:

- (i) NPCO/TL, as appropriate: Technical support, including preparation and implementation of work plans, coordination, financial management and administrative inputs, and ensure timely deployment of consultants
- (ii) Briefing consultants and project visitors on local situation and tasks. Support consultants (URB team members) in planning, preparation and completion of subproject activities.

- (iii) Undertake land use and land capability assessment component, and associated analyses and assessments, as stipulated in the RRP and detailed in PAM and other Project documents.
- (iv) Undertake collection and analysis of the agro-ecological conditions of selected priority watersheds in the assigned river basin that impact its ecological functions, including an assessment of current land use patterns and determination of appropriateness of existing land use patterns.
- (v) Undertake, with the assistance of concerned Specialists and Project staff, participatory mapping of the watersheds' current land use and the proposed management zones or land uses in the assigned river basin.
- (vi) Supervise the conduct of socioeconomic analysis of potential beneficiaries, with special reference to poor and vulnerable, and indigenous people.
- (vii) Ensure proper documentation of social, technical, policy, legislative and institutional constraints that must be addressed to ensure restoration of ecological functions of the assigned URB.
- (viii) Organize and facilitate stakeholder workshops at the provincial, and local government levels to present the data on land use and land capability assessments and other social and environmental data and present options for investments to be included in the management plan
- (ix) Assist the RPCO, PPMO and WMPCO in promoting the Project to the LGU officials and other stakeholders by presenting the Project and its benefits consistent with the overall Project adopted policies and strategies
- (x) Oversee associated assessments in social, environment (including potential climate change impacts), institutional, and policy aspects to be undertaken by other members of the team with a view to generate adequate and appropriate data for preparation of management plans for the watersheds within the assigned river basin with particular focus on traditional sustainable development management practices in line with the needs and aspirations of the indigenous population;
- (xi) Based on a thorough review of lessons learned in natural resources, and environmental management of watersheds, contribute to the design of an appropriate monitoring and evaluation framework for monitoring progress and performance of the Project in accordance with ADB Guidelines and documentation provided as part of the RRP;
- (xii) Undertake, in coordination with the concerned Specialist, the Strategic Environmental Assessment (SEA) of the management plans prepared for the watersheds in the assigned river basin and ensure that climate change considerations are embedded in the SEA for the management plan;
- (xiii) Facilitate the participatory preparation of the Management Plans for the watersheds in the assigned river basin ;
- (xiv) Provide the guidance to the URB consultants' team and field staff in the preparation of the feasibility study for integrated natural resources and environmental management (INREM) investment program, encompassing appropriate investments and associated policy adjustments to ensure appropriate levels of conservation, rehabilitation, and management of selected critical watersheds of assigned river basin;
- (xv) Ensure that the management plans include investment options for natural resources conservation, rehabilitation and management of selected watersheds within the assigned river basin, identifying various investment packages and their climate change risks and mitigation under each option together with indigenous Peoples' Development Plan (if applicable), Involuntary Resettlement Plan (if applicable), Institutional capacity building plan, cost estimates for investments, financing options (including options for grant financing under various global conservation/environmental funds (GEF/CDM/Others), economic and financial

analysis, and policy adjustments indicating milestones for compliance and bench marks for monitoring;

- (xvi) Coordinate with the Training Specialist for the conduct of training workshops for raising environmental awareness and environmental management at the LGU level (provincial and municipality) within the assigned URB; and
- (xvii) Organize and conduct river basin level stakeholder workshops and obtain feedback and concurrence on proposed investment options with the assistance of concerned Specialists from both the URB Team and NPCO based team.
- (xviii) Perform other tasks the NPCO or TL may assign/request.

25. In undertaking these tasks, the DTL/DPMA will work under the direction and supervision of the NPCO/TL with the RPCO/PPMO and WMPCO and in close coordination with concerned LGUs, local government agencies, and other stakeholders' groups particularly in the preparation of the management plans. The DTL will update the NPCO/TL on the progress of work through periodic reports and regular meetings and submit periodic progress reports that the ADB and NPCO/TL will require.

26. Minimum/Preferred Qualification. The DTL/DPMA should have at least 15 years of work experience 5 of which must be related or relevant to the project. He/She is a graduate and post graduate degrees in natural sciences (such forestry or biology). He/she is fluent in spoken and written English, preferably fluent in spoken local dialect(s) of place of assignment. He/she has experience in managing foreign assisted projects such as WB/ADB funded Projects, has good understanding of the ADB procurement and disbursements procedures.

3. Economist

27. The consultant will review the Project related documentation, including the PAM, to better understand the economics objectives and implications of proposed investments under the Project. The consultant will facilitate the effective and efficient carrying out of the approval process of all sub-project investments funded by the Project in relation to Output 2, and ensure that agreed criteria are strictly applied. He/she will have the following functions and responsibilities in supporting the RPCO, PPMO/Provincial INREM Council (PINREM-C) and/or and Watershed Management Council (WMC):

- (i) Assist in the setting up the processes and procedures for the preparation and appraisal processes of the sub projects Manage the sub-components' appraisal process, and take responsibility for ensuring that the PPMO and PINREM-C has the appropriate skills to focus on reviewing each individual sub-component proposal;
- (ii) Set up investment benchmarks (ensuring appropriate baseline and annual indicators are identified and measured) to be used in initial sub-component screening for different types of investment and establish detailed models and working procedures in coordination with relevant line agencies;
- (iii) Establish and disseminate a set of procedures to ensure an orderly and timely flow of rural infrastructure investment proposals;
- (iv) Together with the Rural Infrastructure Engineer, agree on a series of time-bound processing targets for rural infrastructure appraisal process;
- (v) Conduct thorough review and evaluation of sub-component feasibility study submitted by MLGUs and conduct field appraisal visits if necessary;
- (vi) Review and provide recommendations regarding the quality of the economic and financial analysis presented for each subproject FSs prepared by project management at the watershed level, whether it meets an acceptable quality standard; where necessary, recommend measures to ensure that the relevant subproject benefits are accurately captured in the analysis;
- (vii) Organize and conduct training workshops for capacity building in the relevant

field in accordance with the capacity building plan at the LGU level (provincial and municipality); and

- (viii) Assist the Team Leader in any other tasks relevant to the expertise of the Consultant including preparing various reports and other documents required by ADB and concerned government institutions.

28. Minimum/Preferred Qualification. The Economist have at least 15 years of work experience, 5 years in feasibility study preparation and/or evaluation; with degree in economics and graduate degree natural science or vice versa. He/she have experience in benefit-cost analysis, project feasibility preparation and assessment preferably for Official Development Assistance (ODA) financed projects. Knowledge of resource economics is an advantage. He/she is fluent in written and spoken English; fluency in pertinent local dialect(s) preferred.

4. Environmental Safeguards and Cumulative Environmental Assessment Specialist

29. The consultant will review the Project related documentation, including the PAM, to better understand the policy and legislation implications of proposed investments under the Project. In this context, the consultant will review various reports/assessments and other relevant background information available with the team or collect additional information to update him/her with the current status of environment related aspects in the selected river basins and proposed subprojects. He/she will visit the field sites, familiarize him/herself with potential environmental issues relevant to the proposed interventions in each subproject area and evaluate the implications of the INREM plans and subproject feasibility studies on the environment and conduct an Initial Environmental Examination of the subprojects in accordance with applicable ADB and National Environmental Assessment Guidelines and in accordance with the Develop Environmental Assessment and Review Framework (EARF). The consultant will:

- (i) Thoroughly familiarize him/herself with the proposed interventions by reviewing available documentation, field visits, discussions and interviews, and discussions with concerned members of the consultants' team;
- (ii) Propose options for enhancement of the role of local communities in monitoring environmental compliance dimensions during implementation of the INREM plans;
- (iii) In consultation with other members of the team, propose capacity building options for various local community groups/organizations that may be involved with monitoring of environmental compliance dimensions including climate risk reduction during implementation, identifying the means and institutions for such capacity building measures;
- (iv) Conduct an environmental assessment of the subprojects under each intervention and prepare an initial environmental examination (IEE) reports for each component and over all environmental impacts of all the interventions within the river basin; in this context, the consultant will use an area based approach, using the selected river basin to determine the scope of the IEE, and all interventions with as interventions for assessment of environmental impacts;
- (v) Present the IEEs to the stakeholders in a stakeholder workshop and obtain feedback and incorporate comments and concerns of stakeholders, as appropriate;
- (vi) Finalize the IEE and prepare a Summary IEE as part of the final report; the IEE report will include appropriate appendixes in accordance with ADB Environmental Guidelines and national guidelines, policies and procedures;
- (vii) Provide technical and administrative support to the team leader in carrying out various tasks related to implementation of the PPTA;

- (viii) In consultation with other members of the team, organize and conduct training workshops for capacity building in the relevant field accordance with the capacity building plan at the LGU level (provincial and municipality); and
- (ix) Assist the Team Leader in any other tasks relevant to the expertise of the consultant including preparing various reports and other documents required by ADB and concerned government institutions.

30. For the strategic and cumulative environmental assessment, the consultant will assess the broad level strategic and cumulative impact on the environment as a consequence of various INREM plans prepared under the INREM process and identify any impacts (adverse or positive) that may result and how any of these adverse impacts may be addressed/mitigated, both within the project and external to the project. The basic steps to be conducted in the strategic environmental assessment are as follows:

- (i) Conduct screening and scoping. Confirm that the investment program is the appropriate plan to be the focus of assessment;
- (ii) Define indicators. Review available sustainability indicators, adopt/adapt a simple and clear set of indicators to evaluate environmental effects;
- (iii) Engage stakeholders. Identify and analyze interests, incentives, roles, mandate, and linkages of the various stakeholders;
- (iv) Identify, predict, and evaluate effects. Identify social and economic changes that will be created by the investment program;
- (v) Integration. Integrate the environmental criteria in the INREM plans that will be specified for each river basin;
- (vi) Mitigation. Based on the review, feedback from stakeholders, and assessment of critical environmental issues, make appropriate recommendations for incorporation in the INREM plans and overall implementation of the investment program;
- (vii) Monitoring. Prepare a monitoring plan to measure environmental effects of mitigation measures;
- (viii) Independent review. Submit strategic and cumulative environmental assessment and documents for independent review;
- (ix) In consultation with other members of the team, organize and conduct training workshops for raising environmental awareness and environmental management at the LGU level (provincial and municipality); and
- (x) Assist the Team Leader in any other tasks relevant to the expertise of the consultant including preparing various reports and other documents required by ADB and concerned government institutions.

31. Minimum/Preferred Qualification. The Environmental Safeguards and Cumulative Environmental Assessment Specialist have at least 15 years of work experience; 5 years are related to the assignment, graduate degree in natural sciences. Experience with the Philippine EIA system and ADB policies related to environmental safeguards is preferred. He/she is fluent in spoken and written English; fluency in pertinent local dialect(s) preferred.

5. ENR Policy, Institutional and Legislation Specialist

32. The consultant will review the Project related documentation, including the PAM, to better understand the policy and legislation objectives and implications of proposed investments under the Project. In this context, the consultant will undertake review and analysis of natural resources, environmental management policies associated with land use and land tenure, and other relevant issues and provide appropriate input for preparation of river basin level INREM Plans for assigned river basin under the Project. In this context, the consultant will be responsible for providing contribution and assistance in the following:

- (i) Collection and documentation of available information and secondary data for assessment of the current policies and associated issues with specific reference to INREM of selected river basins in each of the major administrative regions at the national and provincial level;
- (ii) Analysis of policy adjustment needs to ensure effective implementation of INREM plans at the LGU level, addressing the associated climate change implications, as well as issues pertaining to land and tree tenure;
- (iii) Propose policy adjustment options (including PES and climate adaptation policy options) for effective implementation the selected investment options for the river basin/watershed management plans;
- (iv) Drafting of appropriate legislation (ordinances, executive orders, etc.) that would be required for effective implementation of INREM plans and effective operation of Payment for Environmental Services (PES);
- (v) Identify critical institutional issues including those relating to un-sustainable logging, mining concessions and inadequate enforcement and implementation of stated policies as relevant to environmental management in coordination with other national consultants;
- (vi) Propose policy adjustment options (including PES and climate adaptation policy options) for effective implementation the selected investment options for the INREM plans for selected river basins;
- (vii) Mediate and resolve conflict(s) that may arise among stakeholders during project implementation.
- (viii) Organize and conduct training workshops for capacity building in the relevant field accordance with the capacity building plan at the LGU level (provincial and municipality), including mediation and conflict resolution; and
- (ix) Assist the URB DTL in any other tasks relevant to the expertise of the Consultant including preparing various reports and other documents required by NPCO and other concerned government institutions.

33. Minimum/Preferred Qualification. The ENR Policy, Institutional and Legislation Specialist have at least 15 years of work experience; 5 years are relevant to the assignment; LLB with degree or graduate degree in social or natural sciences. He/she is familiar with the law and policies on natural resources, DENR issuances on forestry and tenurial instruments, Joint DENR-DILG issuances, Local Government Code and local legislation processes. Experience in mediation and conflict resolution is preferred. He/she is fluent in written and spoken English and pertinent local dialect(s).

6. Financial Specialist (Financing Mechanism and Performance-Based Grant System)

34. The consultant will review the Project related documentation, including the PAM, to better understand the financial management, procurement, and Performance Based Grant System (PBGS) objectives and implications of proposed investments under the Project. The consultant will work in close collaboration and consultation with other members of the team, participating beneficiaries and the private sector to ensure effective implementation with specific reference to financial fund flows and operation of PBGS. Specifically, the consultant will:

- (i) Review the objectives, scope, activities, management, implementation arrangements for various components and subprojects and determine their appropriateness in achieving the objectives, and in achieving expected benefits;
- (ii) Coordinate with MDFO for the policy and procedures for the Performance Based Grant for INREMP LGU participants to encourage the adoption of watershed management and ensure its continued practice and sustainability of its benefits;

- (iii) Conduct consultations, together with concerned Specialist, with the various stakeholder groups to determine the best acceptable financial mechanism to provide support and financial incentives to ensure sustainability of the benefits of different Project activities or sub projects;
- (iv) Design and recommend financing mechanisms for the sustained participation of stakeholder-beneficiaries in the sub-projects of Component 2.
- (v) Perform related tasks that may be required during implementation and requested by NPCO/TL.

35. Minimum/Preferred Qualification. The Financial Specialist (financing mechanism and PBGS) has at least 15 years of work experience, 3 years related to the assignment; has a graduate degree in Business Administration. He/she is familiar with government accounting, ADB disbursement procedures and MDFO operations; and is fluent in written and spoken English.

7. Geographical Information Systems (GIS) Specialist, Mapping

36. The consultant will review the Project related documentation, including the PAM, to better understand the GIS based Monitoring and Evaluation objectives and implications of proposed investments under the Project. The consultant will work in close collaboration and consultation with other members of the team, participating beneficiaries and the private sector to ensure effective implementation of the C&P objectives. The consultant will the contractors for land use and land capability assessment to develop appropriate maps and datasets for establishment of a spatial data base as the saline for longer term monitoring of land use information for informed decision making. In this context, the consultant will:

- (i) Review satellite images, if needed, and work with other specialists in updating the data on the bio-physical, socioeconomic, climatic, and institutional conditions of the watersheds in selected river basins to update their characterization in accordance with integrated watershed management Guidelines;
- (ii) In coordination with other consultants, prepare maps including on land uses, drainage, political boundaries, hydrological vulnerabilities, population and settlement, infrastructure, location of indigenous peoples, cultural resources and critical areas for biodiversity conservation in the watershed;
- (iii) Establish whether target end-users require software upgrading and data management training to enable effective use of the procured/developed GIS data sets from the modelling studies;
- (iv) Establish data presentation formats following ADB guidelines on logos and spellings, and interface it with the INREM information systems so that data can be made available to partners in a user-friendly format for maps and presentations and program implementation;
- (v) Collaborate closely with concerned government agencies involved in monitoring and spatial mapping;
- (vi) In consultation with other members of the team, organize and conduct training workshops for raising environmental awareness and environmental management at the LGU level (provincial and municipality); and
- (vii) Assist the Team Leader in any other tasks relevant to the expertise of the consultant including preparing various reports and other documents required by ADB and concerned government institutions.

37. Minimum/Preferred Qualification. The GIS Specialist for Mapping have at least 15 years work experience with 5 years in the use of GIS mapping land uses/cover; must have degree in natural sciences such as forestry, geology or geography, with training or graduate

studies in GIS. Extensive experience in mapping land uses with community participation is an advantage. Familiarity with database/ information system development is an advantage. He/she is fluent in written and spoken English and preferably in pertinent local dialect(s).

8. Information, Education and Communication and Public Participation Specialist

38. The consultant will review the Project related documentation, including the PAM, to better understand the Information, Education and Communication and Public Participation objectives and implications of proposed investments under the Project. The consultant will work in close collaboration and consultation with other members of the team, participating beneficiaries and the private sector to ensure effective implementation of the Consultation & Participation (C&P) objectives. Specifically, the consultant will:

- (i) In cooperation with the Social Development/Safeguards Specialist, provide guidance to URB project implementers on the design and conduct of consultation and participation plans and assess results leading to recommendations for C&P plan enhancements or corrective actions;
- (ii) Develop complementary arrangements with CSOs (NGOs/POs/IPOs), academe and research-extension agencies within the river basins to engage in resource and information sharing and provision of technical assistance;
- (iii) Promote the adoption of conservation farming technologies by adherence to consultation and participation with and among stakeholders especially the vulnerable and incentive-providers, the LGUs;
- (iv) Strengthen the existing POs/IPOs in the arena for participation especially among early adopters. Involve local NGOs/CSOs to provide the technical expertise and form the pool of trainers, or engage in M&E activities to ensure that farmers adopt the conservation farming technologies and that farm inputs and information are received in a timely manner;
- (v) Develop IEC materials as part of the development support communication provided in the C&P plan in order to enhance the informed decision-making process among the vulnerable stakeholders. Materials will be developed according to the needs and preferences of the community. For instance, some IP groups still prefer interpersonal communication as the most effective way of informing and educating farmers especially when role-playing is included. For other stakeholders, print and audiovisual materials are more than enough. Along with site-species matching of conservation farming technology is the need to match the appropriate and preferred IEC modalities. The Consultant will ensure that these are included in the Social Assessment to be conducted immediately before investments are made;
- (vi) In consultation with other members of the team, organize and conduct training workshops for raising environmental awareness and environmental management at the LGU level (provincial and municipality); and
- (vii) Assist the Team Leader in any other tasks relevant to the expertise of the consultant including preparing various reports and other documents required by ADB and concerned government institutions.
- (viii) URB based Consultants shall perform the tasks within the assigned URB and coordinate with the NPCO based counterpart for consistency in approach, content and form or format.

39. Minimum/Preferred Qualification. The Information, Education and Communication and Public Participation Specialist have at least 15 years of work experience, at least 5 years related to development of IEC materials; degree in development communications and graduate degree in social sciences (i.e., sociology, anthropology) or vice versa. He/she have

experience in public or community participation, skillful at packaging technologies into easy-to-read materials; is fluent in written and spoken English. URB Based Specialists preferably is also fluent in written and spoken local dialect(s) and is able to translate and package English IEC materials into local dialect(s).

9. Institutional Assessment and Capacity Building Specialist

40. The consultant will review the Project related documentation, including the PAM, to better understand the current LGU capacity and capacity building objectives and implications of proposed investments under the Project. The consultant will work in close collaboration and consultation with other members of the team, participating beneficiaries and the private sector to ensure effective implementation of the Project objectives. In this context, the consultant will:

41. Based on the updated input received from various members of the team as well as the capacity building plan prepared during the project preparation phase, assess the current capacities of LGUs and participating Local Community Organizations (LCOs) or Peoples' Organizations (POs) to (i) handle and effectively implement various Project activities

including land use and land capability assessment, INREM planning, participatory demarcation and zoning, and other activities. In this context, the consultant will:

- (i) Undertake a needs assessment at various levels of implementation (regional, provincial, and municipality) within government and nongovernment institutions, LCOs and POs to determine the capacity building needs at these levels;
- (ii) Based on the assessment, develop a comprehensive Capacity Building Plan to ensure effective implementation of the Project at all levels of implementation;
- (iii) Determine the appropriate mechanism and methodologies for capacity building at various levels;
- (iv) In consultation with other members of the team, develop training/capacity building modules, and identify the means and the mechanisms for imparting the training needed for capacity enhancement at various levels;
- (v) In consultation with other members of the team, organize and conduct training workshops for raising environmental awareness and environmental management at the LGU level (provincial and municipality); and
- (vi) Assist the Team Leader in any other tasks relevant to the expertise of the consultant including preparing various reports and other documents required by ADB and concerned government institutions.

42. Minimum/Preferred Qualification. The Institutional Assessment and Capacity Building Specialist have at least 15 years of work experience, 5 related to capacity building; has graduate degree in relevant social sciences (BA, HR, sociology). He/she is familiar with watershed management, DENR and LGUs operations and adept in using participatory approach; and is fluent in written and spoken English and preferably in pertinent local dialect(s).

10. Land Use and Land Capability Assessment Specialist

43. The consultant will Review the Project related documentation, including the PAM, to better understand the objectives and implications of Land Use and Land Capability Assessment in planning and management in the proposed investments under the Project. In ensuring effective implementation of the Project, the consultant will:

- (i) Develop a strategy for undertaking land use and land capability assessment of selected river basins with the aim of determination of the most appropriate land

use that ensures integrity of the watersheds and reverses the trends of watershed degradation. In this context. He/she will supervise the desk based analysis and field surveys and mapping required to collect data for analysis; the information thus generated and analyzed would serve as the basis for land capability classification, zoning and management planning;

- (ii) Participate and act as resource person, on matters related to land use planning and management, in stakeholders' workshops that will be conducted in his assigned URB/Region or Province (for URB based consultants) to identify and document localized issues and concerns in land use planning, classification, zoning and management planning with active participation of stakeholders' in ensuring sustainable natural resources management;
- (iii) Based on the watershed land use assessment, alternative land use options, and other information relevant to his expertise, contribute to the development of the river basins natural resources management plan;
- (iv) In coordination with the Training Specialist, organize and conduct training workshops for capacity building in the relevant field accordance with the capacity building plan at the LGU level (provincial and municipality); and
- (v) Assist the Team Leader in any other tasks relevant to the expertise of the consultant including preparing various reports and other documents required by ADB and concerned government institutions.
- (vi) URB based Consultants shall perform specified tasks within their assigned URB and in coordination with the NPCO based counterpart for consistency in approach and uniformity in the analysis and presentation of reports, maps or outputs.

44. Minimum/Preferred Qualification. Land Use & Land Capability Assessment Specialist have at least 15 years of work experience, 5 years related to the land capability assessment for watershed management in the region/province of URB assignment; graduate and post graduate degrees in natural sciences (forestry, hydrology). He/she is adept in using participatory approach to land use/capability assessment; and is fluent in written and spoken English and preferably in pertinent local dialect(s).

11. Social Development/Safeguards Specialist (IPs, Resettlement), Poverty and Gender

45. The safeguard requirements of the ADB seek to improve the benefit to the poor and the disadvantaged groups within the target area. The consultant will review the Project related documentation, including the FSR and consultants reports produced during project preparation and PAM, to better understand the policy and legislation implications of proposed investments under the Project. In this context, the consultant will be responsible for assessment of the social dimensions (including indigenous people, resettlement, risk reduction, gender & development, land tenure, institutions, stakeholder participation, organization of workshops, and participant feedback) of proposed investments or subprojects under the Project.

46. The consultant will:

a. For Indigenous People

- (i) Review and provide recommendations regarding the IPDF found in the PAM (linked document) to ascertain the extent of interventions considered appropriate under the proposed subproject;
- (ii) Determine which subprojects will require an Indigenous Peoples Development Plan (IPDP);
- (iii) Where an IPDP is required, provide guidance to local specialists in processing for the appropriate planning prerequisites in engaging IPs/IP communities like

- the Field Based Investigation (FBI) and/or Free and Prior Informed Consent (FPIC) that may lead to the issuance of the Certificate Precondition (CP) to achieve meaningful IP participation in subprojects;
- (iv) Review and provide recommendations regarding the affected/participating IP communities included in subproject feasibility studies (FSs) as prepared by URB consultants to ensure conformity with the IPDF and ADB's other social development policies;
 - (v) Visit sites, examine and provide recommendations regarding subprojects to determine any opportunities to enhance positive impacts on IPs/IP communities;
 - (vi) Orient Assisting Professionals recruited to undertake IPDP preparation, facilitation and reporting procedures to be followed;
 - (vii) Assist in developing and implementing the training program on IP sensitivity aspects of the Project.
 - (viii) Assist NPCO in setting up internal monitoring system and provide guidance in the contracting and implementation of external monitoring for IP safeguards.
 - (ix) Liaise with NCIP Central Office on behalf of the DENR, to effectively implement the IPDF and generate the necessary and acceptable IPDPs within the URBs.

b. For Involuntary Resettlement

- (i) Review and provide recommendations regarding the Resettlement Framework (RF) in the PAM (linked document) within the context of physical and economic displacement;
- (ii) Determine which subprojects will require a Resettlement Plan (RP);
- (iii) Where a RP is required, provide guidance to local specialists in identifying interventions to achieve meaningful participation to subprojects using as reference, the RF and harmonizing with the IPDF in cases where affected persons may belong to IP communities within or outside ancestral domains;
- (iv) Review Resettlement Plans (RP) prepared at the URB level for all subprojects; ensure RPs are prepared based on standards acceptable to ADB and incorporate summaries in the subproject FSs;
- (v) Visit all participating provinces and orient the URBs on the RF toward preparation of the RP, if needed;
- (vi) Orient Assisting Professionals recruited to undertake RP preparation, facilitation and reporting procedures to be followed;
- (vii) Assist in developing and implementing the training program on involuntary resettlement aspects of the Project.
- (viii) Assist NPCO in setting up internal monitoring system and provide guidance in the contracting and implementation of external monitoring for involuntary resettlement.

c. For Social Development Specialist (Gender and Poverty):

- (i) Review and provide recommendations regarding the Poverty Reduction and Social Strategy (PRSS) and Gender Action Plan (GAP) found in the PAM (linked documents) to ascertain the extent of interventions considered appropriate under the proposed Project;
- (ii) Assist NPCO in determining qualitative and quantitative benefit streams for economic evaluations of subprojects;
- (iii) Prepare and undertake briefing and interactive sessions on poverty and gender issues with key URB stakeholders and in the process update/localize and implement the INREMP GAP to ensure gender targets are realized with special concern on IP women inclusion;
- (iv) In coordination with the Training Specialist, provide guidance in the capacitation of women stakeholders towards project implementation;
- (v) Review and provide recommendations regarding the poverty and gender aspects of subproject FSs to ensure conformity with ADB's gender policies;

- (vi) Provide guidance in the conduct of social assessment at the URB level to determine any opportunities to enhance positive impacts on vulnerable groups and/or women;
- (vii) Together with other consultants, monitor subproject implementation and alert the NPCO to any vulnerable group or gender problem identified during project implementation;
- (viii) Assist NPCO in setting up the monitoring system with focus on poverty and gender issues/indicators.

47. Minimum/Preferred Qualification. The Social Development/Safeguards Specialist (IPs, Resettlement, Poverty and Gender) have at least 15 years of work experience, 5 years related to social development. He/she have graduate and post graduate degrees in social sciences (i.e., sociology, anthropology). Familiarity with country systems and the ADB-related policies on social safeguards (IP and involuntary resettlement) and poverty and gender assessment is preferred. He/she is fluent in written and spoken English and pertinent local dialect(s).

12. Training Specialist

48. The consultant will review the Project related documentation, including the PAM, to better understand the capacity building objectives and implications of proposed activities under the Project. The consultant will have the following functions and responsibilities in supporting the NPCO, RRPO, PPMO, and WMPCO.

- (i) Coordinate with the other Consultants regarding the necessity, content, schedule and target participants of training courses proposed to be conducted;
- (ii) Prepare the training modules for the identified training courses in coordination with the concerned consultants;
- (iii) Prepare the schedule of all the training courses that will be conducted or funded under the Project regardless of location;
- (iv) Conduct or supervise the conduct of training courses, in coordination with the concerned Project offices and/ or LGUs;
- (v) Ensure the proper and complete documentation of each of the training courses conducted, undertaken and/or funded under the Project, which shall include, among others, the list and profile of participants, general description of the course, training module, and assessment of performance of the participants; and
- (vi) Perform other tasks that maybe assigned by the Team Leader as may be necessary.

49. Minimum/Preferred Qualification. The Training Specialist have at least 15 years of work experience, 5 years related to the assignment; and degree in social sciences and graduate degree in natural sciences or vice versa. Experience in developing training materials on watershed management is an advantage; is able to work with other consultants for technical content. He/she is fluent in written and spoken English; fluency in pertinent local dialect(s) is preferred.

13. Rural Infrastructure Engineer

50. The consultant will review the Project related documentation, including the PAM, to better understand the Rural Infrastructure Engineering objectives and implications of proposed investments under the Project. The consultant will have the following functions and responsibilities in supporting the PPMO and the WMPCO:

- (i) Conduct a thorough evaluation of MLGUs to determine their eligibility for project

support in relation to their technical, administrative and financial capacity to implement proposed rural infrastructure sub-components;

- (ii) Review specifications for rural infrastructure works (rural access, communal irrigation schemes, post-harvest facilities and potable water supply schemes) and prepare and agree on standard designs and specifications for use by MLGUs,
- (iii) Check, review and evaluate detailed engineering plans, design, drawings, PERT/CPM, Gantt Chart and S-Curve, detailed estimates and programs of work submitted by the MLGU through the WMPCO for approval by the concerned Watershed Management Council and NPCO;
- (iv) Establish mechanisms and standard costs to be used in determining the work item unit costs that would be used as the means to release funds to MLGUs for completed work and establish procedures for approving variations in planned work and resolving claims for extra payments;
- (v) Review contractors' claims for additional payments, extension of time or other such claims as recommended by MLGU;
- (vi) Propose revision, where necessary, to procedures, standard specifications and work item unit cost calculations;
- (vii) Review and assess O&M requirements and arrangements and make recommendations for optimum O&M plan;
- (viii) Review, analyze and evaluate periodic reports of sub-components implementation as submitted by the WMPCO, conduct field inspection if necessary and recommend solutions to problems encountered;
- (ix) Review completion reports, conduct final field inspection, prepare final inspection report and recommend turn-over of completed facilities to the LGU and end users;
- (x) Organize and conduct training workshops for capacity building in the relevant field accordance with the capacity building plan at the LGU level (provincial and municipality); and
- (xi) Assist the Team Leader in any other tasks relevant to the expertise of the Consultant including preparing various reports and other documents required by ADB and concerned government institutions.

51. Minimum/Preferred Qualification. The Rural Infrastructure Engineer have at least 15 years of work experience, 5 years in monitoring and inspection during construction of rural infrastructures. He/she is a licensed civil engineer, preferably with graduate degree in road/irrigation/water supply system engineering or equivalent work experience. Experience in defining and/or assessing specifications for road, irrigation and water systems is preferred. He/she is locally based and available on call or short notice as may be required by the Project. He/she is fluent in written and spoken English and preferably in pertinent local dialect(s).

14. Conservation Farming and Technical Extension Specialist

52. The consultant will review the Project related documentation, including the PAM, to better understand the conservation farming and technical extension objectives and implications of proposed investments under the Project. In ensuring effective implementation of the Project, the consultant will:

- (i) Provide appropriate assistance and supervision support in the undertaking of conservation farming and technical extension in the selected URBs/WSs;
- (ii) Provide inputs in the preparation of criteria on the selection of beneficiary-households to participate in conservation farming;
- (iii) Advice on the selection of demonstration sites;
- (iv) Identify appropriate technologies for the areas and suitable to the identified

- households;
- (v) Develop strategies to promote such package/menu of technologies to the identified and other potential beneficiaries;
- (vi) Together with the Training Specialist, develop conservation farming training modules and conduct and/or oversee the conduct by administration or through service providers of such training modules at the sites;
- (vii) Undertake follow-up activities on the demonstration farms and application of technologies by the trained beneficiary-households; and
- (viii) Develop, together with the financial specialist and social development and safeguards specialist, mechanism to sustainably fund uptake of the successful demonstrated technologies by other households/barangays within the watershed.
- (ix) Perform other tasks that maybe assigned by the Team Leader as may be necessary.

53. Minimum/Preferred Qualification. The Conservation Farming and Technical Extension Specialist have at least 15 years of work experience, 5 years related to agroforestry and conservation farming. He/she must have experience in extension work and able to work with the community for long periods; familiar with local situation and can work with other consultants on the determination of suitable trees and crops introduced or advanced. He/she is fluent in written and spoken English and preferably in pertinent dialect(s).