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MEMORANDUM

FOR : THE REGIONAL EXECUTIVE DIRECTORS
Region 6, 7, 11, and CARAGA

FROM : THE EXECUTIVE DIRECTOR
River Basin Control Office

SUBJECT : REQUEST FOR ASSISTANCE IN UPDATING THE
RIVER BASIN MANAGEMENT AND DEVELOPMENT
MASTER PLANS FOR THE ILOG- HILABANGAN AND
TAGUM-LIBUGANON RIVER BASINS

DATE : SEP 18 2023

This is to inform you that the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), through the *Ecosystem-based Management and Ecosystem Services Valuation in Two River Basins in the Philippines (E2RB) Project*, has commissioned the Orient Integrated Development Consultants, Inc. (OIDCI) to undertake the updating of the Integrated River Basin Management and Development Master Plans for the Ilog-Hilabangan and Tagum-Libuganon River Basins.

In this regard, we kindly request from your respective regions to provide OIDCI with all the necessary assistance to facilitate the successful completion of their activities related to the master plan updates. This assistance may encompass granting OIDCI access to pertinent data, reports, studies, as well as coordinating with local stakeholders, to execute their tasks efficiently.

This Office firmly believes that this collaborative effort will strengthen the long-term conservation and management of the Ilog-Hilabangan and Tagum-Libuganon River Basins, benefiting both the environment and the communities reliant on these vital resources.

For your information and favorable consideration.


DR. SEVILLO D. DAVID JR., CESO III

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MEMO NO. 2023 - 809

Terms of reference (ToR) for the procurement of services below the EU threshold

Tagum-Libuganon River Basin master plan updating to integrate ecosystem-based adaptation into river basin management and development	Project number/ cost centre: 15.9078.5- 001.02
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Team coordinator	9
Ecosystem Specialist	10
Climate Change Adaptation-Disaster Risk Reduction and Management (CCA-DRRM) Specialist	11
Hydrologist/Hydrogeologist	11
Environmental Economist	12
Institutional development specialist	12
Database and Geographic Information Systems Specialist	13
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1. List of abbreviations

AVB	General Terms and Conditions of Contract (AVB) for supplying services and work 2018
BMUV	German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety, and Consumer Protection
DEM	Digital Elevation Model
DENR	Department of Environment and Natural
DOST	Department of Science and Technology
EbA	Ecosystem-based Adaptation
E2RB	Ecosystem-based Adaptation in 2 river basins
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IFSAR	Interferometric Synthetic Aperture Radar
IRBMDMP	Integrated River Basin Management and Development Master Plan
LIDAR	Light Detection and Ranging
MGB	Mines and Geosciences Bureau
NAMRIA	National Mapping and Resources Information Administration
NOAH	Nationwide Operational Assessment of Hazards
RBO	River Basin Office
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PHIVOLCS	Philippine Institute of Volcanology and Seismology
TLRB	Tagum-Libuganon River Basins
ToR	Terms of reference

2. Brief information on the project

The Department of Environment and Natural Resources (DENR) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH are implementing the “Improved Ecosystem Services and Reduced Vulnerability to Climate Change through Ecosystem-based management and Application of Ecosystem Values in Two River Basins in the Philippines” project, also known as “Ecosystem-based Adaptation (EbA) in 2 river basins” or “E2RB”, which aims to strengthen ecosystem services, protect biodiversity and reduce vulnerability to climate change and natural disasters in 2 river basins through integrated management and application of ValuES (ecosystem services assessment) and ecosystem-based adaptation measures (including a network of protected areas). The project is financed by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety, and Consumer Protection (BMUV).

Output 1 of the project is coordinated implementation of EbA measures, and an important activity leading to it is to integrate EbA priorities into local and national development plans such as the river basin master plans. The review and update of the river basin master plan provides an opportunity for the Project to mainstream the EbA measures into the framework of integrated water resource management in close collaboration with the DENR.

3. Context

The continued degradation of water catchment areas and river basins pose a serious threat to the health and well-being of communities. Despite various national and local initiatives to strengthen river basin management, development and conservation efforts remain uneven.

The Tagum-Libuganon River Basin is one of the 18 major river basins in the country, and a priority river basin of the E2RB Project. The TLRB has an Integrated River Basin Management and Development Master Plan that applies an integrated watershed management approach to protect, maintain and restore the ecological stability of the watersheds and promote sustainable development. However, the master plan is not fully implemented due to the lack of coordination and resources.

The river basin master plan of the Tagum-Libuganon River Basin (TLRB) was formulated in 2016. It is time to review and update the masterplan to include recent developments and address the emerging issues in the area. The E2RB Project will engage a team to lead the activity, taking into consideration biological diversity and their capacity to provide goods and services and include concepts of the EbA principles and ecosystem-financing.

The integrated river basin management and development master plan (IRBMDMP) should incorporate implications of the new climate normal in addressing concerns of the river basin on 1) water resources management, 2) watershed management, 3) flood control/mitigation, disaster risk reduction and hazards management, 4) wetland management (to include rivers, river deltas, marshlands and coastal areas), 5) economic development, and 6) institutional linkages and organizational structure for river basin management.

GIZ shall hire the consultant for the anticipated contract term, from August 2023 to February 2024.

c. The contractor shall provide the following service:

Objective/s:

To review and update the Integrated River Basin Management and Development Master Plan (IRBMDMP) of the Tagum-Libuganon River Basin to incorporate implications of the new climate normal and mainstreaming EbA principles in addressing concerns on 1) water resources management, 2) watershed management, 3) flood control/mitigation, disaster risk reduction and hazards management, 4) wetland management (to include rivers, river deltas, marshlands and coastal areas), 5) economic development, and 6) institutional linkages and organizational structure for river basin management.

The contractor will conduct the review and updating of the IRBMDMP following the recommended phases of activities to ensure a comprehensive and participatory process:

Phase 1: Data gathering, assessment and stakeholder consultations

1. Review of Water Policy and Basin Development Plans
 - 1.1 Review existing policies regarding river basin management and development in relation to climate change at national, regional, local, and sectoral levels.
 - 1.2 Evaluate management regimes of existing and abolished/inactive river basins organizations stating merits and demerits for the establishment of River Basin Office (RBO) in the RB of interest.
 - 1.3 Review and assess the existing plans and projects within the river basin such as Comprehensive Land Use Plan, Forest Land Use Plan, Regional and Provincial Development Plans, etc. for integration and harmonization in the river basin master plan and investment plan.
 - 1.4 Assess the effectiveness of related policies, laws, decrees, regulations and circulars pertaining to the management of water resources (water resources allocation, water rights, pollution control, etc.), watershed (tenurial instruments, protection and conservation efforts, etc.), wetlands (RAMSAR Convention and other biodiversity conservation efforts, etc.), flood control/mitigation, disaster risk reduction and hazards management (easement management, zoning ordinances, etc.)
2. Ecological Profiling of the River Basin
 - 2.1 Collect all information on the biophysical and socio-economic profile of the river basin such as, but not limited to, topography, existing land cover and land use, inventory of flora and fauna, geology, demographic data, etc. and translate these into tables, maps and/or graphs.
 - 2.2 Gather all the information up to the latest available data including (a) the list of relevant completed, ongoing and incoming programs and projects in the river basins, (b) data on surface and ground water resources development and use in the basin and water rights, (c) water balance study factoring in climate change projections for the area. Reflect relevant information on the map. Identify and map major infrastructures such as dams, flood controls, irrigation, hydropower facilities, bulk water projects, ground water pumping stations/major wells, erosion control structures, hydro-meteorological stations (synoptic/agro-meteorological stations), stream flow gauging stations, water quality monitoring stations, waste disposal sites, etc. and water sources such as springs, freshwater lakes, etc.
 - 2.3 Gather data on climate projections to determine expected changes in rainfall, mean annual temperature, extreme events, and other parameters. Information on

these per province for 2020 and 2050 are available in the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) Publication "Climate Change in the Philippines." More detailed projections (per municipality) can be obtained upon request from PAGASA.

- 2.4 Prepare basin-wide multi-hazard map based on official maps of the Mines and Geosciences Bureau (MGB), Philippine Institute of Volcanology and Seismology (PHIVOLCS), National Mapping and Resources Information Administration (NAMRIA), Department of Science and Technology (DOST) and other relevant government offices.

Agency	Map Scale
MGB	1:10,000
PHIVOLCS	1:10,000
NAMRIA (base map)	1:50,000
NAMRIA (Interferometric Synthetic Aperture Radar - IFSAR)	1:10,000
DOST (Light Detection and Ranging -LiDAR data)/Project NOAH (Nationwide Operational Assessment of Hazards)	High resolution image (Digital Elevation Model - DEM)

- 2.5 Review and map existing land use as one of the bases for proposed land use.

3. Situational Analysis

- 3.1 Assess and explain the implications of the new climate normal, extremes and variability applicable in the basin on the following:

- 3.1.1 water resources management (water allocation for consumptive and non-consumptive uses; water balance: water supply and water demand with and without climate change, projected water balance over a period of time).
- 3.1.2 watershed management (vulnerability assessment to fire hazard, deforestation, and soil erosion; vulnerability of critical habitats of endemic, threatened/vulnerable and critically endangered species, and key biodiversity areas within the river basin).
- 3.1.3 flood control/mitigation, disaster risk reduction and hazards management (adaptation measures, vulnerability assessment to flooding or drought, soil erosion and landslide, sea level rise, storm surges, etc. with the use of modelling. Reflect this on the map); and
- 3.1.4 wetland management (vulnerability of rivers, river deltas, lakes, marshlands, and coastal areas to drought, flooding, and extreme high temperature events)

- 3.2 Review the appropriateness of the completed, ongoing, and incoming infrastructure and other investment programs/projects in terms of effectiveness in addressing the major issues in the basins most especially, in relation to climate projections in the area.

Phase 2: Formulation of river basin-wide development plan

1. Conduct consultation with stakeholders and relevant institutions at the national, regional, provincial, municipal, and community level.
2. Discuss the implications of the new climate normal, extremes, and variability on water resources management, watershed management, flood control/mitigation, disaster risk reduction and hazards management, and wetlands management.

3. Prepare the vision, mission, goals, and objectives of the master plan taking into consideration the impacts of climate change on the river basin.
4. Recommend measures (programs and projects) to reduce the vulnerability to climate change impacts and improve the adaptive capacity of the natural ecosystems and communities within the basin with respect to water as a resource and as a hazard. Estimate the indicative cost for implementing these new measures. Formulate prioritization criteria for selection and implementation of programs and projects.
5. Collect data for the River Basin Integrated Information Management System (RBIIMS) of the DENR to ensure that all data for the river basin are properly kept and will be available for future use (such as for budget defense, for monitoring and evaluation of the plan implementation, for preparation of the next cycle of the plan, for knowledge management and advocacy, etc.). This includes the digital files of geo-referenced maps used in the study, the historical data (in excel format) for each thematic areas, the modelling and projection results including the systems and the manuals used, etc.
6. Propose/recommend policy revisions/amendments to address the identified policy gaps/conflicts/overlaps and climate change impacts.
7. Formulate a monitoring and evaluation system for the master plan. Identify important indicators to be monitored including climate-related indicators, who should monitor and how they should be monitored. In case of data gaps, propose measures to generate the lacking information for future use.
8. Develop the most feasible and appropriate institutional arrangement to implement the Integrated River Basin Management and Development Master Plan.
9. Formulate Integrated River Basin Management and Development Master Plan with a separate Investment Plan (short-term, mid-term and long-term) considering climate change impacts and threats and strong integration of adaption and mitigation measures, among others, in consultation with other government agencies in the area.
10. Develop a communication plan to ensure that stakeholders, including donors and partner agencies, know, understand, and support the master plan.

Consultation workshops with stakeholders and representatives of concerned government offices shall be conducted by the contractor to get their comments and recommendations, and to ascertain their ownership of the Plan. The contractor must ensure that the process is participatory and ensure engagement of sectors such as women, youth, and indigenous peoples.

Certain milestones, as laid out in the table below, are to be achieved by certain dates during the contract term, and at locations:

Milestone	Deadline/place/person responsible
Inception report	3rd week after signing of contract
Submission of Phase 1 deliverables: <ul style="list-style-type: none"> • Report on the conduct of: (i) review of Water Policy and Basin Development Plans, (ii) Ecological Profiling of the River Basin, and (iii) Situational Analysis • A comprehensive report on the climate 	2nd month after signing of contract

vulnerability assessment conducted in the river basin • Proceedings from the consultation/discussion with the concerned stakeholders	
Submission of the draft IRBMDMP of TLRB (see Annex for report contents)	4th month after signing of contract
Submission of revised draft IRBMDMP incorporating comments and recommendations of the Technical Working Group and National Steering Committee, and final consultation with stakeholders	5th month after signing of contract
Submission of the final draft IRBMDMP of TLRB for endorsement of the Regional Development Council	6th month after signing of contract

The contractor, working independently, will be responsible for correct and ethical data processing (if any) during the conduct of the policy study, in compliance with the EU General Data Protection Regulation and the Philippines' Data Privacy Act. The contractor should only submit to GIZ aggregated/anonymised data (where applicable), with no personal data/information traceable to any respondents/actors in this assignment.

The sources/references used must be fully indicated using APA-Style consistently (where appropriate/relevant).

All copyrights of outputs generated by the consultancy shall belong to GIZ.

Brief monthly status reports will be submitted to GIZ through the E2RB Project to provide the progress achieved and constraints impeding smooth implementation. The contractor will coordinate with the E2RB Project for the review of the deliverable. The final draft master plan shall be submitted to the E2RB Project for endorsement to the DENR River Basin Control Office.

4. Concept

The bidder needs to show how the objectives and activities defined in Section C are going to be achieved, if applicable under consideration of further specific method-related requirements (technical-methodological concept). In addition, the bidder must describe the project management system for service provision.

Technical-methodological concept

Strategy: The bidder is required to consider the tasks to be performed with reference to the objectives of the services put out to tender. Following this, the bidder presents and justifies the strategy with which it intends to provide the services for which it is responsible for.

The bidder is required to present the actors relevant for the services for which it is responsible for and describe the **cooperation** with them.

The bidder is required to present and explain its approach to **steering** the measures with the project partners and its contribution to the results-based monitoring system.

The bidder is required to describe the key **processes** for the services for which it is responsible and create a schedule that describes how the services according to Section c are to be provided. In particular, the bidder is required to describe the necessary work steps and, if applicable, take account of the milestones and contributions of other actors in accordance with Section c.

The bidder is required to describe its contribution to knowledge management for the partner and GIZ and promote scaling-up effects (**learning and innovation**).

Other specific requirements

The process of developing the Integrated River Basin Management and Development Master Plan should be transparent and consulted among various stakeholders through a collaborative and participatory approach. It should consider the diverse needs and perspectives of all stakeholders especially the various local communities their cultural sensitivities and livelihood affected by any developments and changes provided in the plan.

Project management of the contractor

The bidder is required to explain its approach for coordination with the GIZ project.

- The contractor is responsible for selecting, preparing, training, and steering the experts (national, short, and long term) assigned to perform the advisory tasks.
- The contractor makes available equipment and supplies (consumables) and assumes the associated operating and administrative costs.
- The contractor manages costs and expenditures, accounting processes and invoicing in line with the requirements of GIZ.

The bidder is required to draw up a **personnel assignment plan** with explanatory notes that lists all the experts proposed in the bid; the plan includes information on assignment dates (duration and expert days) and locations of the individual members of the team complete with the allocation of work steps as set out in the schedule.

5. Personnel concept

The bidder is required to provide personnel who are suited to filling the positions described, based on their CVs, the range of tasks involved and the required qualifications.

The below specified qualifications represent the requirements to reach the maximum number of points.

Team Leader (Integrated River Basin/Forest Resources Management Specialist)

Tasks

- Overall responsibility for the advisory packages of the contractor (quality of outputs and submission deadlines), personnel management, strategic planning, project steering, and supervision of all activities and outputs.
- Coordinate and ensure communication with GIZ, partners and others involved in the project.
- Supervise the process following the recommended procedures in developing the IRBMDMP.

- Lead the preparation of all reports (inception, interim, and final reports) and the TLRB master plan including the investment plan based on international best practices, principles, national and provincial regulations, and feedback from all consultation workshops.

Qualifications

- Advanced university degree (Masters or equivalent experience) in environment or water resources management or engineering, environmental law, environmental economics, environmental planning, ecology, social forestry, or other related fields.
- 20 years of professional experience on legal and policy frameworks, institutional mechanisms on natural resources management, environment protection, ecological security, and integrated water resources management in the Philippines.
- 10 years in river basin/watershed management master plan formulation, national policy, law and regulation, and planning, technical advisory services to multi-stakeholders (corporations, international organizations, government, and academic institutions).
- 6 years of management/leadership experience as project team leader or manager in a company, leading a multi-disciplinary team.
- 10 years of experience in projects in the Philippines, of which 2 years in projects in Mindanao.
- 10 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem and adaptation measures.
- Familiarity on principles of ecosystem-based adaptation (EbA) is an advantage.
- Proven skills in facilitation of technical workshops with multi-sectoral participation
- Excellent planning and organisation skills.
- Excellent business language skills in English and Filipino (Bisaya will be an advantage).

Team coordinator

Tasks

- Support the team leader and coordinate with experts in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Consolidate information, documents, and other relevant materials for the IRBMDMP of TLRB.
- Document activities and prepare meeting reports and minutes relevant to the tasks.
- Provide administrative and logistical support to the team.
- Lead the development of the investment plan to ensure alignment with the IRBMDMP short-, mid-, and long-term priorities.
- Support in the review of relevant national and local regulations for watershed management covering TLRB, including identification of key issues and constraints in integrating EbA with integrated water resources management (IWRM) for river basins, and recommendations for harmonizing EbA with IWRM.

Qualifications

- University qualification (Masters or equivalent experience) in environmental planning, urban and regional planning, business management, or related field, with at least 5 years of related experience.

- 7 years of practical experience in management aspects of environment and water- and watershed-related projects in the Philippines.
- Familiarity with Ecosystem-based Adaptation (EbA) is a requirement.
- 3 years of experience in providing technical advisory services to multi-stakeholders (corporations, international organizations, government, and academic institutions).
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino. Fluency in the local language is an advantage.

Ecosystem Specialist

Tasks

- Support the team leader in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Review existing procedures, manuals, guidelines, and standard operation procedures relating to ecosystems, river basin, and watershed management.
- Recommend appropriate and cost-efficient EbA interventions to rehabilitate degraded watersheds and reduce effects of climate-induced disaster impacts.
- Provide strategies to monitor the interventions and assess appropriateness of EbA measures adopted.
- Participate in consultations and meetings to ensure integrated ecosystem management principles are captured in the process.

Qualifications

- University qualification (Masters or equivalent experience) in environmental planning, environment sciences, watershed management, and/or sustainable natural resource management.
- 7 years of related practical experience in biodiversity conservation, sustainable forestry, and integration of land and water resources management at landscape level
- Familiar with sustainable forest management, integrated ecosystem management, and ecosystem-based adaptation (EbA).
- Proven experience with designing ecosystem conservation methods to address climate-induced disasters.
- Thorough knowledge of climate change and its potential effects and related environmental problems in the Philippines.
- Has good understanding of integrated ecosystem management and watershed development processes.
- 3 years of experience in providing technical advisory services to multi-stakeholders (corporations, international organizations, government, and academic institutions)
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino.

Climate Change Adaptation-Disaster Risk Reduction and Management (CCA-DRRM) Specialist

Tasks

- Support the team leader in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Review and assess the climate change adaptation and disaster risk reduction management strategic framework of the TLRB IRBMDMP.
- Identify key issues affecting the TLRB watershed management (with emphasis on climate change impacts through literature review, rapid assessments, consultations with key agencies and stakeholders).
- Participate in consultations and meetings to include CCA and DRRM in the master plan.
- Review, consolidate and process relevant information and project outputs to integrate CCA-DRRM in the crafting and finalization of the updated master plan.

Qualifications

- University qualification (Masters or equivalent experience) in fisheries, agriculture, environment, communications, social sciences or other related field.
- 5 years of experience, knowledge, and understanding of concepts, principles and approaches to climate change and disaster risk reduction and management.
- 5 years of experience in developing climate change and disaster risk reduction and management plans.
- 3 years of experience in providing technical advisory services to multi-stakeholders (corporations, international organizations, government, and academic institutions)
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino.

Hydrologist/Hydrogeologist

Tasks

- Support the team leader in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Identify key issues affecting the TLRB watershed management (with emphasis on river health, water resources management and allocation) through literature review, rapid assessments, consultations with key agencies and stakeholders.
- In collaboration with other national experts, review national and international methodologies and best practices of river basin and watershed management considering key issues faced within the watershed.
- Provide recommendations on the development of hydrological monitoring systems for water resources use and allocation, and how it can contribute to DENR's existing River Basin Integrated Information Management System (RB-IIMS).
- Participate in consultations and meetings in relation to the master plan review and updating.

Qualifications

- University qualification (Masters or equivalent experience) in hydrology, or other related fields, with at least 5 years of relevant experience.
- 5 years of experience, knowledge and understanding on hydrological monitoring and modelling, and river basin and water resources management.

- Proven experience in developing strategic river basin water management plans.
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino.

Environmental Economist

Tasks

- Support the team leader in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Quantify environmental impact of new developments and ecosystem values included in the master plan.
- Provide inputs on potential cost to ecosystems and ecosystem services such as tourism, outdoor recreation, provision of water, etc based on planned developments.
- Provide inputs on the integration of ecosystem financing in the river basin master plan.
- Update the investment plan to incorporate ecosystem conservation and financing.
- Participate in consultations and meetings in relation to the master plan review and updating.

Qualifications

- University qualification (Masters or equivalent experience) in economics, math, environmental management, natural resources management, or other related fields, with at least 5 years of relevant experience.
- 7 years of experience, knowledge and understanding of environmental policies/governance and compliance.
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino.

Institutional development specialist

Tasks

- Support the team leader in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Provide inputs on an inclusive institutional capacity development of local institutions at the barangay, municipal and provincial (and national) levels as required.
- Lead the development of the capacity development and communication planning to facilitate multi-stakeholder engagement in the development and implementation of the IRBMDMP.
- Ensure that all actions in the proposed activities specifically in the communication plan giving attention to human rights, inclusivity, and equality as an ethical principle.
- Ensure that the process and methodologies are inclusive, and gender-responsive.
- Participate in consultations and meetings in relation to the master plan review and updating.

Qualifications

- University qualification (Masters or equivalent experience) in development communication, psychology, sociology, gender and development, or other related social science fields, with at least 5 years of relevant experience.
- 7 years of experience in communications, capacity building and providing technical assistance to institutional development.
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino.

Database and Geographic Information Systems Specialist

Tasks

- Support the team leader in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Obtain and compile GIS data needed to perform various spatial analyses in a single database including all necessary metadata (source, date, etc.) for smooth turnover to GIZ and to relevant agencies.
- Implement various spatial analysis to provide relevant information and maps needed by the masterplan.
- Provide all relevant GIS files (Shapefiles and QGIS Project file (.qgs or .qgz)), used to prepare the maps to GIZ.
- Participate in consultations and meetings in relation to the master plan review and updating.

Qualifications

- University qualification (Masters or equivalent experience) in Geodetic Engineering, Geoinformatics, Geography, Environmental Science, or other related fields.
- 7 years of experience in GIS spatial analysis and map preparation.
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino.

Research assistants (up to 2)

Tasks

- Assist the team leader/experts in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Assist in the data gathering requirements of specialists to fulfil the data requirements in the river basin master plan updating.
- Assist in the organisation and documentation of consultations and meetings in relation to the master plan review and updating.
- Perform tasks that may be assigned in relation to the master plan review and updating.

Qualifications

Terms of reference (ToR) for the procurement of services below the EU threshold

Ilog-Hilabangan River Basin master plan updating to integrate ecosystem-based adaptation into river basin management and development	Project number/ cost centre: 15.9078.5-001.02
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NOAH	Nationwide Operational Assessment of Hazards
RBO	River Basin Office
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PHIVOLCS	Philippine Institute of Volcanology and Seismology
IHRB	Ilog-Hilabangan River Basins
ToR	Terms of reference

2. Brief information on the project

The Department of Environment and Natural Resources (DENR) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH are implementing the “Improved Ecosystem Services and Reduced Vulnerability to Climate Change through Ecosystem-based management and Application of Ecosystem Values in Two River Basins in the Philippines” project, also known as “Ecosystem-based Adaptation (EbA) in 2 river basins” or “E2RB”, which aims to strengthen ecosystem services, protect biodiversity and reduce vulnerability to climate change and natural disasters in 2 river basins through integrated management and application of ValuES (ecosystem services assessment) and ecosystem-based adaptation measures (including a network of protected areas). The project is financed by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety, and Consumer Protection (BMUV).

Output 1 of the project is coordinated implementation of EbA measures, and an important activity leading to it is to integrate EbA priorities into local and national development plans such as the river basin master plans. The review and update of the river basin master plan provides an opportunity for the Project to mainstream the EbA measures into the framework of integrated water resource management in close collaboration with the DENR.

3. Context

The continued degradation of water catchment areas and river basins pose a serious threat to the health and well-being of communities. Despite various national and local initiatives to strengthen river basin management, development and conservation efforts remain uneven.

The Ilog-Hilabangan River Basin (IHRB) is one of the 18 major river basins in the country, and a priority river basin of the E2RB Project. The IHRB has an Integrated River Basin Management and Development Master Plan that applies an integrated watershed management approach to protect, maintain and restore the ecological stability of the watersheds and promote sustainable development. However, the master plan is not fully implemented due to the lack of coordination and resources.

The river basin master plan of the Ilog-Hilabangan River Basin (IHRB) was formulated in 2014. It is time to review and update the masterplan to include recent developments and address the emerging issues in the area. The E2RB Project will engage a team to lead the activity, taking into consideration biological diversity and their capacity to provide goods and services and include concepts of the EbA principles and ecosystem-financing.

The integrated river basin management and development master plan (IRBMDMP) should incorporate implications of the new climate normal in addressing concerns of the river basin on 1) water resources management, 2) watershed management, 3) flood control/mitigation, disaster risk reduction and hazards management, 4) wetland management (to include rivers, river deltas, marshlands and coastal areas), 5) economic development, and 6) institutional linkages and organizational structure for river basin management.

GIZ shall hire the consultant for the anticipated contract term, from August 2023 to February 2024.

c. The contractor shall provide the following service:

Objective/s:

To review and update the Integrated River Basin Management and Development Master Plan (IRBMDMP) of the Ilog-Hilabangan River Basin to incorporate implications of the new climate normal and mainstreaming EbA principles in addressing concerns on 1) water resources management, 2) watershed management, 3) flood control/mitigation, disaster risk reduction and hazards management, 4) wetland management (to include rivers, river deltas, marshlands and coastal areas), 5) economic development, and 6) institutional linkages and organizational structure for river basin management.

The contractor will conduct the review and updating of the IRBMDMP following the recommended phases of activities to ensure a comprehensive and participatory process:

Phase 1: Data gathering, assessment and stakeholder consultations

1. Review of Water Policy and Basin Development Plans
 - 1.1 Review existing policies regarding river basin management and development in relation to climate change at national, regional, local, and sectoral levels.
 - 1.2 Evaluate management regimes of existing and abolished/inactive river basin organizations stating merits and demerits for the establishment of River Basin Office (RBO) in the RB of interest.
 - 1.3 Review and assess the existing plans and projects within the river basin such as Comprehensive Land Use Plan, Forest Land Use Plan, Regional and Provincial Development Plans, etc. for integration and harmonization in the river basin master plan and investment plan.
 - 1.4 Assess the effectiveness of related policies, laws, decrees, regulations and circulars pertaining to the management of water resources (water resources allocation, water rights, pollution control, etc.), watershed (tenurial instruments, protection and conservation efforts, etc.), wetlands (RAMSAR Convention and other biodiversity conservation efforts, etc.), flood control/mitigation, disaster risk reduction and hazards management (easement management, zoning ordinances, etc.)
2. Ecological Profiling of the River Basin
 - 2.1 Collect all information on the biophysical and socio-economic profile of the river basin such as, but not limited to, topography, existing land cover and land use, inventory of flora and fauna, geology, demographic data, etc. and translate these into tables, maps and/or graphs.
 - 2.2 Gather all the information up to the latest available data including (a) the list of relevant completed, ongoing and incoming programs and projects in the river basins, (b) data on surface and ground water resources development and use in the basin and water rights, (c) water balance study factoring in climate change projections for the area. Reflect relevant information on the map. Identify and map major infrastructures such as dams, flood controls, irrigation, hydropower facilities, bulk water projects, ground water pumping stations/major wells, erosion control structures, hydro-meteorological stations (synoptic/agro-meteorological stations), stream flow gauging stations, water quality monitoring stations, waste disposal sites, etc. and water sources such as springs, freshwater lakes, etc.
 - 2.3 Gather data on climate projections to determine expected changes in rainfall, mean annual temperature, extreme events, and other parameters. Information on

these per province for 2020 and 2050 are available in the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) Publication "Climate Change in the Philippines." More detailed projections (per municipality) can be obtained upon request from PAGASA.

- 2.4 Prepare basin-wide multi-hazard map based on official maps of the Mines and Geosciences Bureau (MGB), Philippine Institute of Volcanology and Seismology (PHIVOLCS), National Mapping and Resources Information Administration (NAMRIA), Department of Science and Technology (DOST) and other relevant government offices.

Agency	Map Scale
MGB	1:10,000
PHIVOLCS	1:10,000
NAMRIA (base map)	1:50,000
NAMRIA (Interferometric Synthetic Aperture Radar - IFSAR)	1:10,000
DOST (Light Detection and Ranging -LiDAR data)/Project NOAH (Nationwide Operational Assessment of Hazards)	High resolution image (Digital Elevation Model - DEM)

- 2.5 Review and map existing land use as one of the bases for proposed land use.

3. Situational Analysis

- 3.1 Assess and explain the implications of the new climate normal, extremes and variability applicable in the basin on the following:

- 3.1.1 water resources management (water allocation for consumptive and non-consumptive uses; water balance: water supply and water demand with and without climate change, projected water balance over a period of time).
- 3.1.2 watershed management (vulnerability assessment to fire hazard, deforestation, and soil erosion; vulnerability of critical habitats of endemic, threatened/vulnerable and critically endangered species, and key biodiversity areas within the river basin).
- 3.1.3 flood control/mitigation, disaster risk reduction and hazards management (adaptation measures, vulnerability assessment to flooding or drought, soil erosion and landslide, sea level rise, storm surges, etc. with the use of modelling. Reflect this on the map); and
- 3.1.4 wetland management (vulnerability of rivers, river deltas, lakes, marshlands, and coastal areas to drought, flooding, and extreme high temperature events)

- 3.2 Review the appropriateness of the completed, ongoing, and incoming infrastructure and other investment programs/projects in terms of effectiveness in addressing the major issues in the basins most especially, in relation to climate projections in the area.

Phase 2: Formulation of river basin-wide development plan

1. Conduct consultation with stakeholders and relevant institutions at the national, regional, provincial, municipal, and community level.

2. Discuss the implications of the new climate normal, extremes, and variability on water resources management, watershed management, flood control/mitigation, disaster risk reduction and hazards management, and wetlands management.
3. Prepare the vision, mission, goals, and objectives of the master plan taking into consideration the impacts of climate change on the river basin.
4. Recommend measures (programs and projects) to reduce the vulnerability to climate change impacts and improve the adaptive capacity of the natural ecosystems and communities within the basin with respect to water as a resource and as a hazard. Estimate the indicative cost for implementing these new measures. Formulate prioritization criteria for selection and implementation of programs and projects.
5. Collect data for the River Basin Integrated Information Management System (RBIIMS) of the DENR to ensure that all data for the river basin are properly kept and will be available for future use (such as for budget defense, for monitoring and evaluation of the plan implementation, for preparation of the next cycle of the plan, for knowledge management and advocacy, etc.). This includes the digital files of geo-referenced maps used in the study, the historical data (in excel format) for each thematic areas, the modelling and projection results including the systems and the manuals used, etc.
6. Propose/recommend policy revisions/amendments to address the identified policy gaps/conflicts/overlaps and climate change impacts.
7. Formulate a monitoring and evaluation system for the master plan. Identify important indicators to be monitored including climate-related indicators, who should monitor and how they should be monitored. In case of data gaps, propose measures to generate the lacking information for future use.
8. Develop the most feasible and appropriate institutional arrangement to implement the Integrated River Basin Management and Development Master Plan.
9. Formulate Integrated River Basin Management and Development Master Plan with a separate Investment Plan (short-term, mid-term and long-term) considering climate change impacts and threats and strong integration of adaption and mitigation measures, among others, in consultation with other government agencies in the area.
10. Develop a communication plan to ensure that stakeholders, including donors and partner agencies, know, understand, and support the master plan.

Consultation workshops with stakeholders and representatives of concerned government offices shall be conducted by the contractor to get their comments and recommendations, and to ascertain their ownership of the Plan. The contractor must ensure that the process is participatory and ensure engagement of sectors such as women, youth, and indigenous peoples.

Certain milestones, as laid out in the table below, are to be achieved by certain dates during the contract term, and at locations:

Milestone	Deadline/place/person responsible
Inception report	3rd week after signing of contract
Submission of Phase 1 deliverables: <ul style="list-style-type: none"> • Report on the conduct of: (i) review of Water Policy and Basin Development Plans, 	2nd month after signing of contract

(ii) Ecological Profiling of the River Basin, and (iii) Situational Analysis. <ul style="list-style-type: none"> • A comprehensive report on the climate vulnerability assessment conducted in the river basin. • Proceedings from the consultation/discussion with the concerned stakeholders. 	
Submission of the draft IRBMDMP of IHRB (see Annex for report contents)	4th month after signing of contract
Submission of revised draft IRBMDMP incorporating comments and recommendations of the Technical Working Group and National Steering Committee, and final consultation with stakeholders	5th month after signing of contract
Submission of the final draft IRBMDMP of IHRB for endorsement of the Regional Development Council	6th month after signing of contract

The contractor, working independently, will be responsible for correct and ethical data processing (if any) during the conduct of the policy study, in compliance with the EU General Data Protection Regulation and the Philippines' Data Privacy Act. The contractor should only submit to GIZ aggregated/anonymised data (where applicable), with no personal data/information traceable to any respondents/actors in this assignment.

The sources/references used must be fully indicated using APA-Style consistently (where appropriate/relevant).

All copyrights of outputs generated by the consultancy shall belong to GIZ.

Brief monthly status reports will be submitted to GIZ through the E2RB Project to provide the progress achieved and constraints impeding smooth implementation. The contractor will coordinate with the E2RB Project for the review of the deliverable. The final draft master plan shall be submitted to the E2RB Project for endorsement to the DENR River Basin Control Office.

4. Concept

The bidder needs to show how the objectives and activities defined in Section C are going to be achieved, if applicable under consideration of further specific method-related requirements (technical-methodological concept). In addition, the bidder must describe the project management system for service provision.

Technical-methodological concept

Strategy: The bidder is required to consider the tasks to be performed with reference to the objectives of the services put out to tender. Following this, the bidder presents and justifies the strategy with which it intends to provide the services for which it is responsible for.

The bidder is required to present the actors relevant for the services for which it is responsible for and describe the **cooperation** with them.

The bidder is required to present and explain its approach to **steering** the measures with the project partners and its contribution to the results-based monitoring system.

The bidder is required to describe the key **processes** for the services for which it is responsible and create a schedule that describes how the services according to Section c are to be provided. In particular, the bidder is required to describe the necessary work steps and, if applicable, take account of the milestones and contributions of other actors in accordance with Section c.

The bidder is required to describe its contribution to knowledge management for the partner and GIZ and promote scaling-up effects (**learning and innovation**).

Other specific requirements

The process of developing the Integrated River Basin Management and Development Master Plan should be transparent and consulted among various stakeholders through a collaborative and participatory approach. It should consider the diverse needs and perspectives of all stakeholders especially the various local communities their cultural sensitivities and livelihood affected by any developments and changes provided in the plan.

Project management of the contractor

The bidder is required to explain its approach for coordination with the GIZ project.

- The contractor is responsible for selecting, preparing, training, and steering the experts (national, short, and long term) assigned to perform the advisory tasks.
- The contractor makes available equipment and supplies (consumables) and assumes the associated operating and administrative costs.
- The contractor manages costs and expenditures, accounting processes and invoicing in line with the requirements of GIZ.

The bidder is required to draw up a **personnel assignment plan** with explanatory notes that lists all the experts proposed in the bid; the plan includes information on assignment dates (duration and expert days) and locations of the individual members of the team complete with the allocation of work steps as set out in the schedule.

5. Personnel concept

The bidder is required to provide personnel who are suited to filling the positions described, based on their CVs, the range of tasks involved and the required qualifications.

The below specified qualifications represent the requirements to reach the maximum number of points.

Team Leader (Integrated River Basin/Forest Resources Management Specialist)

Tasks

- Overall responsibility for the advisory packages of the contractor (quality of outputs and submission deadlines), personnel management, strategic planning, project steering, and supervision of all activities and outputs.
- Coordinate and ensure communication with GIZ, partners and others involved in the project.

- Supervise the process following the recommended procedures in developing the IRBMDMP.
- Lead the preparation of all reports (inception, interim, and final reports) and the IHRB master plan including the investment plan based on international best practices, principles, national and provincial regulations, and feedback from all consultation workshops.

Qualifications

- Advanced university degree (Masters or equivalent experience) in environment or water resources management or engineering, environmental law, environmental economics, environmental planning, ecology, social forestry, or other related fields.
- 20 years of professional experience on legal and policy frameworks, institutional mechanisms on natural resources management, environment protection, ecological security, and integrated water resources management in the Philippines.
- 10 years in river basin/watershed management master plan formulation, national policy, law and regulation, and planning, technical advisory services to multi-stakeholders (corporations, international organizations, government, and academic institutions).
- 6 years of management/leadership experience as project team leader or manager in a company, leading a multi-disciplinary team.
- 10 years of experience in projects in the Philippines, of which 2 years in projects in Mindanao.
- 10 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem and adaptation measures.
- Familiarity on principles of ecosystem-based adaptation (EbA) is an advantage.
- Proven skills in facilitation of technical workshops with multi-sectoral participation
- Excellent planning and organisation skills.
- Excellent business language skills in English and Filipino (Bisaya will be an advantage).

Team coordinator

Tasks

- Support the team leader and coordinate with experts in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Consolidate information, documents, and other relevant materials for the IRBMDMP of IHRB.
- Document activities and prepare meeting reports and minutes relevant to the tasks.
- Provide administrative and logistical support to the team.
- Lead the development of the investment plan to ensure alignment with the IRBMDMP short-, mid-, and long-term priorities.
- Support in the review of relevant national and local regulations for watershed management covering IHRB, including identification of key issues and constraints in integrating EbA with integrated water resources management (IWRM) for river basins, and recommendations for harmonizing EbA with IWRM.

Qualifications

- University qualification (Masters or equivalent experience) in environmental planning, urban and regional planning, business management, or related field, with at least 5 years of related experience.
- 7 years of practical experience in management aspects of environment and water- and watershed-related projects in the Philippines.
- Familiarity with Ecosystem-based Adaptation (EbA) is a requirement.
- 3 years of experience in providing technical advisory services to multi-stakeholders (corporations, international organizations, government, and academic institutions).
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino. Fluency in the local language is an advantage.

Ecosystem Specialist

Tasks

- Support the team leader in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Review existing procedures, manuals, guidelines, and standard operation procedures relating to ecosystems, river basin, and watershed management.
- Recommend appropriate and cost-efficient EbA interventions to rehabilitate degraded watersheds and reduce effects of climate-induced disaster impacts.
- Provide strategies to monitor the interventions and assess appropriateness of EbA measures adopted.
- Participate in consultations and meetings to ensure integrated ecosystem management principles are captured in the process.

Qualifications

- University qualification (Masters or equivalent experience) in environmental planning, environment sciences, watershed management, and/or sustainable natural resource management.
- 7 years of related practical experience in biodiversity conservation, sustainable forestry, and integration of land and water resources management at landscape level
- Familiar with sustainable forest management, integrated ecosystem management, and ecosystem-based adaptation (EbA).
- Proven experience with designing ecosystem conservation methods to address climate-induced disasters.
- Thorough knowledge of climate change and its potential effects and related environmental problems in the Philippines.
- Has good understanding of integrated ecosystem management and watershed development processes.
- 3 years of experience in providing technical advisory services to multi-stakeholders (corporations, international organizations, government, and academic institutions)
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino.

Climate Change Adaptation-Disaster Risk Reduction and Management (CCA-DRRM) Specialist

Tasks

- Support the team leader in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Review and assess the climate change adaptation and disaster risk reduction management strategic framework of the IHRB IRBMDMP.
- Identify key issues affecting the IHRB watershed management (with emphasis on climate change impacts through literature review, rapid assessments, consultations with key agencies and stakeholders.
- Participate in consultations and meetings to include CCA and DRRM in the master plan.
- Review, consolidate and process relevant information and project outputs to integrate CCA-DRRM in the crafting and finalization of the updated master plan.

Qualifications

- University qualification (Masters or equivalent experience) in fisheries, agriculture, environment, communications, social sciences or other related field.
- 5 years of experience, knowledge, and understanding of concepts, principles and approaches to climate change and disaster risk reduction and management.
- 5 years of experience in developing climate change and disaster risk reduction and management plans.
- 3 years of experience in providing technical advisory services to multi-stakeholders (corporations, international organizations, government, and academic institutions)
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino.

Hydrologist/Hydrogeologist

Tasks

- Support the team leader in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Identify key issues affecting the IHRB watershed management (with emphasis on river health, water resources management and allocation) through literature review, rapid assessments, consultations with key agencies and stakeholders.
- In collaboration with other national experts, review national and international methodologies and best practices of river basin and watershed management considering key issues faced within the watershed.
- Provide recommendations on the development of hydrological monitoring systems for water resources use and allocation, and how it can contribute to DENR's existing River Basin Integrated Information Management System (RB-IIMS).
- Participate in consultations and meetings in relation to the master plan review and updating.

Qualifications

- University qualification (Masters or equivalent experience) in hydrology, or other related fields, with at least 5 years of relevant experience.
- 5 years of experience, knowledge and understanding on hydrological monitoring and modelling, and river basin and water resources management.
- Proven experience in developing strategic river basin water management plans.
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino.

Environmental Economist

Tasks

- Support the team leader in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Quantify environmental impact of new developments and ecosystem values included in the master plan.
- Provide inputs on potential cost to ecosystems and ecosystem services such as tourism, outdoor recreation, provision of water, etc based on planned developments.
- Provide inputs on the integration of ecosystem financing in the river basin master plan.
- Update the investment plan to incorporate ecosystem conservation and financing.
- Participate in consultations and meetings in relation to the master plan review and updating.

Qualifications

- University qualification (Masters or equivalent experience) in economics, math, environmental management, natural resources management, or other related fields, with at least 5 years of relevant experience.
- 7 years of experience, knowledge and understanding of environmental policies/governance and compliance.
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino.

Institutional development specialist

Tasks

- Support the team leader in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Provide inputs on an inclusive institutional capacity development of local institutions at the barangay, municipal and provincial (and national) levels as required.
- Lead the development of the capacity development and communication planning to facilitate multi-stakeholder engagement in the development and implementation of the IRBMDMP.
- Ensure that all actions in the proposed activities specifically in the communication plan giving attention to human rights, inclusivity, and equality as an ethical principle.

- Ensure that the process and methodologies are inclusive, and gender-responsive.
- Participate in consultations and meetings in relation to the master plan review and updating.

Qualifications

- University qualification (Masters or equivalent experience) in development communication, psychology, sociology, gender and development, or other related social science fields, with at least 5 years of relevant experience.
- 7 years of experience in communications, capacity building and providing technical assistance to institutional development.
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino.

Database and Geographic Information Systems Specialist

Tasks

- Support the team leader in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Obtain and compile GIS data needed to perform various spatial analyses in a single database including all necessary metadata (source, date, etc.) for smooth turnover to GIZ and to relevant agencies.
- Implement various spatial analysis to provide relevant information and maps needed by the masterplan.
- Provide all relevant GIS files (Shapefiles and QGIS Project file (.qgs or .qgz)), used to prepare the maps to GIZ.
- Participate in consultations and meetings in relation to the master plan review and updating.

Qualifications

- University qualification (Masters or equivalent experience) in Geodetic Engineering, Geoinformatics, Geography, Environmental Science, or other related fields.
- 7 years of experience in GIS spatial analysis and map preparation.
- 2 years of experience in development cooperation projects, working with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino.

Research assistants (up to 2)

Tasks

- Assist the team leader/experts in organising activities and coordinate with the river basin stakeholders in relation to the schedule, plans, and progress to achieve the objectives.
- Assist in the data gathering requirements of specialists to fulfil the data requirements in the river basin master plan updating.
- Assist in the organisation and documentation of consultations and meetings in relation to the master plan review and updating.

- Perform tasks that may be assigned in relation to the master plan review and updating.

Qualifications

- University qualification environmental science, biology, forestry, social science or other related fields.
- 2 years of experience in administrative and logistics support
- 2 years of experience in project implementation in cooperation with NGOs/Government/Private Sector/International Organisations, especially in the fields of climate change, environment, ecosystem services and valuation, biodiversity, ecosystem, and adaptation measures.
- Excellent business language skills in English and Filipino.

Additional skills of all experts:

In addition to their specialist qualifications, the following qualifications are required of all team members:

- Team skills and ability to collaborate.
- Good initiative and ability to think out-of-the box.
- Good communication skills.
- Sociocultural competence.
- Interdisciplinary thinking.
- Efficient, partner- and client-focused working methods.
- Ability to present complex ideas in a simple and persuasive manner.

The bidder must provide a clear overview of all proposed short-term experts and their individual qualifications.

GIZ believes that diversity and inclusion is critical to the success of the activities, and we encourage contractors to recruit, develop and retain the most talented people from a diverse pool of experts.

6. Costing requirements

Assignment of personnel

Team leader:	46 expert days
Team coordinator:	70 expert days
CCA-DRRM Specialist:	23 expert days
Ecosystem/Watershed Specialist:	23 expert days
Hydrologist/Hydrogeologist:	23 expert days
Environmental Economist:	23 expert days
Institutional Development/Gender Specialist:	26 expert days
Database and GIS Specialist:	26 expert days
Research assistant/s (2)	70 expert days

Travel

The bidder is required to calculate the travel by the specified experts and the experts it has proposed based on the places of performance stipulated in Section c and list the expenses separately by daily allowance, accommodation expenses, flight costs and other travel expenses.

Workshops, training

The contractor implements the following workshops:

- 1 stakeholder consultation workshop at the start of the contract
- 1 stakeholder consultation for the initial draft of the master plan including the investment plan and communication plan
- 1 Final consultation workshop to finalize the master plan and investment plan

Other costs

- Updating meetings
- Communication
- Supplies

Flexible remuneration item

Internal reallocation of costs within the agreed/approved contract remuneration items is permissible up to 10% provided the overall contract sum will not change. Subject to provision of evidence during settlement. In case of change in expert's input days (increase and or decrease of workdays in certain positions) - request in writing to the GIZ subject for approval.

7. Inputs of GIZ or other actors

GIZ and/or other actors are expected to make the following available:

- Funds based on the approved budget
- Coordination with the DENR RBCO and DENR Regional River Basin Focal Persons.
- Relevant information and materials on IHRB, and EbA, including IRBMDMP and other related policy documents.
- Security and risk management briefing in preparation for field work
- Administrative briefing on applicable GIZ rules and guidelines for the contract.

8. Requirements on the format of the bid

The structure of the bid must correspond to the structure of the ToR. In particular, the detailed structure of the concept (Section 3) is to be organised in accordance with the positively weighted criteria in the assessment grid (not with zero). It must be legible (font size 11 or larger) and clearly formulated. The bid is drawn up in English (language).

The complete bid shall not exceed 10 pages (excluding CVs).

The CVs of the personnel proposed in accordance with Section 4 of the ToR must be submitted using the format specified in the terms and conditions for application. The CVs shall not exceed 4 pages. The CVs must clearly show the position and job the proposed person held in the reference project and for how long.

If one of the maximum page lengths is exceeded, the content appearing after the cut-off point will not be included in the assessment.

Please calculate your price bid based exactly on the aforementioned costing requirements. In the contract, the contractor has no claim to fully exhaust the days/travel/workshops/ budgets. The number of days/travel/workshops and the budget amount shall be agreed in the contract as 'up to' amounts. The specifications for pricing are defined in the price schedule.

9. Annex

Indicative Master Plan Outline

Part	Section / Chapter	Description	# of pages
	Executive Summary	Key highlights, issues, challenges, and recommendations introduced in the plan	1
MAIN REPORT (IRBDMP) *subject to consultation and negotiations			
I		Rationale	
II		Objectives	
III		Description of the area	
IV		Sectoral descriptions and plans	
V		Communication Plan	
VI		Institutional Framework	
VII		Investment Plan	
ANNEX		Activity reports/documentation/photos, references, maps	