

**MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT
CENTRAL PROJECT OFFICE**

**MEKONG DELTA INTEGRATED CLIMATE RESILIENCE AND
SUSTAINABLE LIVELIHOODS PROJECT (ICRSL)**

**TERMS OF REFERENCE
PACKAGE CPMU-CS-QCBS-05: PROJECT
MONITORING & EVALUATION CONSULTANT**

Funded by:
World Bank (WB)

02/2017

1. INTRODUCTION

1.1 Project Description

1. The Government of Vietnam received a Credit proceedings from International Development Association to finance Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods Project (ICRSL project). The Project will commence in Quarter III 2016 with development objectives of “Enhance the tools to make plans for climate change impacts adaptation, improve climate resilience in management and use of land and water resources in some selected provinces of MKD”. Total investment cost of the Project is 385.979 million USD (310 million USD from IDA, 72.547 million USD from Government counterpart fund and 2.432 million USD from private sector fund). The Project is implemented in 5 Components:

- Component 1: Strengthen Monitoring, Analysis and Information Data Base (61.29 million USD)
- Component 2: Managing Floods in Upper Delta (100.909 million USD)
- Component 3: Adapting to Salinity Transitions in Delta Estuary (107.075 million USD)
- Component 4: Protecting Coastal Areas in Delta Peninsula (101.148 million USD)
- Component 5 – Project Management and Implementation Support (14.557 million USD)

Component 1: Strengthen Monitoring, Analysis and Information Data Base

2. Component 1 will have Ministry of Natural Resources and Environment as its executing agency. Proposals from MONRE, MPI and MARD in Component 1 focus on addressing the lack of information, synchronized documents and optimal use of a database in management, instruction, planning, policy making, coordination, especially in operation of irrigation systems to serve production and livelihood with minimal adverse impacts from climate change.

3. This component consists of 07 sub-projects, including 04 sub-projects to be implemented by MONRE, 01 sub-project to be implemented by MPI, and 02 sub-projects to be implemented by MARD.

(i). Sub-project “Investment on upgrade and completion of surface water resources monitoring and observation network in MKD”

(ii). Sub-project “Upgrade, construct groundwater resources monitoring and observation network in MKD in context of climate change”

(iii). Sub-project “Develop a monitoring and observation network over coast and river bank movements in MKD, using remote sensors”

(iv). Sub-project “Investment to construct a MKD Center to house integrated data related to water resources and environment for analyzing, assessing and informing decision makers about sustainable development in context of climate change”

(v). Sub-project “Enhance forecast capacity for management and operation of hydraulic works in MKD”

(vi). Sub-project “Comprehensive development of infrastructure, in response of climate change, for socio-economic development in MKD”.

Component 2: Managing floods in Upper Delta

4. The Upper Delta area is characterized by natural occurring deep floods in the wet season. The development of an extensive agricultural flood control system has shifted the flood waters to other areas in the Delta and also reduced the beneficial effects of flooding including replenishing soil fertility, groundwater recharge, and sustaining aquatic ecosystems. The main objective of this component is to i) protect and enhance positive effects of floods through flood control measures (flood retention) and increase rural incomes and protect high-value assets by introducing flood control measures (flood retention) in rural areas and alternative models in agriculture and fisheries; ii) provide livelihood support to farmers so that they can have alternative crop during flood season, including aquaculture; iii) construct and upgrade infrastructure to protect high-value assets such as urban areas and orchards; and iv) support efficient water use in agriculture during dry season.

5. In view of mitigating impacts from strong floods in the Upper Delta, 3 sub-projects are proposed under this Component (Sub-project 1, 2, 3) to enhance flood discharge capacity, particularly strong floods in 2 primary floodplains of MKD. Their targets are to improve flood discharge from Plain of Reeds to West Sea, expanding flood retention area while not blocking, slowing down floods in Plain of Reeds.

Component 3: Adapting to Salinity Transitions in the Estuary

6. The Mekong River divides into 8 distributaries which flow into the East Sea through several estuaries: Tiểu, Đại, Ba Lai, Hàm Luông, Cỏ Chiên, Cung Hầu, Trần Đề, Định An, in which, a sluice was built at Ba Lai estuary. This area is naturally characterized by low flows during the dry season which allow saline water to extend far inland. Over the past twenty years, closed freshwater systems designed for rice production have been developed in this area consisting of large polders ringed by dikes and with sluice gates to control saline water intrusion. The long-term sustainability of this strategy is questionable due to reduced dry season water availability and sea-level rise. In addition, farmers are rapidly converting to more profitable shrimp farms along the coast, often causing mangrove destruction, water pollution, shrimp diseases, and non-sustainability of shrimp farming.

7. This component aims to address the challenges related to salinity intrusion, coastal erosion, sustainable aquaculture and improved livelihoods for communities living in the coastal areas. This will potentially consist of: i) construction of coastal defenses consisting of combinations of compacted earth embankments and coastal mangrove belts; ii) modification of water and agricultural infrastructure along the coastal zone to allow flexibility for sustainable aquaculture activities and adapt to changing salinity levels; iii) support to farmers to transition (where suitable) to more sustainable brackish water

activities such as mangrove-shrimp, rice-shrimp, and other aquaculture activities; and iv) supporting climate smart agriculture by facilitating water use efficiency in the dry season.

8. In the face of challenges from the sea, including severe salinity intrusion, 4 sub-projects are proposed under this Component (Sub-project 4, 5, 6, 7). Their targets are to support flexible infrastructure investments that allow adaptation to saline water economy and combine with existing infrastructure to transfer production models, avoiding conflicts between freshwater and saline water zones. Focus will also be put on coastal protection, mangrove restoration and forestation, restructuring and rearranging production as appropriate to various conditions of land and water resources. Combine with to promote benefits of invested systems such as North Ben Tre, South Ben Tre, Nam Mãng Thít.

Component 4: Protecting Coastal Areas in Delta Peninsula

9. In contrast to the adjacent estuary zone, there are no distributaries of the Mekong river flowing through the peninsula and historically the peninsula was covered by dense mangroves sustained by localized rainfall. In recent decades, there has been an explosion of shrimp farming along the coast which relies heavily on groundwater abstraction to maintain the proper salinity level. The over-abstraction of groundwater has resulted in significant land subsidence. The natural mangrove forest has been significantly reduced, although there are still significant protected mangrove zones. An extensive canal network and sluice gates have also been developed to bring freshwater from the Mekong River into the peninsula to allow rice production.

10. This component aims to address the challenges related to coastal erosion, groundwater management, sustainable aquaculture, and improved livelihoods for communities living in the coastal and river mouth areas. This will potentially consist of: i) construction/ rehabilitation of coastal defenses consisting of combinations of compacted earth embankments and coastal mangrove belts; ii) modification of water control infrastructure along the coastal zone to allow flexibility for sustainable aquaculture activities; iv) control of groundwater abstraction for agricultural/aquaculture and development of freshwater supplies for domestic use; v) support to farmers to practice more sustainable brackish water activities such as mangrove-shrimp and other aquaculture activities; and vi) supporting climate smart agriculture by facilitating water use efficiency.

11. This Component includes 3 proposed sub-projects (Sub-project 8, 9, 10). Similar to the Estuary zone, the Delta Peninsula is susceptible to impacts from the sea, land subsidence, erosion and especially freshwater shortage. Therefore, it is much essential to support infrastructure investments that prevent dyke erosion on the West coast, restore mangrove ecosystem on West and East coasts, rearrange production patterns so that climate resilience can be achieved. In these 3 sub-projects, Sub-project 8 targets erosion on West coast in Ca Mau province and sustainable activities in ecological shrimp-farming here. Moreover, this sub-project supports people living in salinity-intruded areas to obtain certificates of ecological shrimp-farming, modernize their production toward better

sustainability and market connectivity. In similar manner, Sub-project 9 targets coastal areas in An Minh and An Bien districts, where freshwater shortage, erosion, sea encroachment have caused local agriculture production to be unstable. TDA9 will address coastal erosion, restore mangrove belt and rearrange production, invest sluices to facilitate transform toward more sustainable and climate-resilient production models and socio-economic development.

12. Similarly, the area to the South of National Highway 1A, in Bac Lieu city, Hoa Binh district, Dong Hai district, is a key aquaculture production area, having contributed greatly to GDP of Bac Lieu province. However, the area is susceptible to erosion, high tides, environment pollution and freshwater shortage.

13. Sub-project 9, 10 will improve coastal protection through mitigating coastal erosion, restoring mangrove, transferring to ecological shrimp-farming to provide high quality materials for export and domestic consumption. This is a very important coastline, therefore it is high priority that we identify coastal area with erosion risks, restore mangrove and saline water ecology.

Component 5: Project Implementation and Management Support

14. This component will be split into project management support and capacity building for MARD, MONRE and MPI. This component is expected to provide incremental running costs and consulting and advisory services for overall project management, financial management, procurement, safeguards and monitoring and evaluation.

1.2 Project Development Objectives and Specific Tasks

15. Enhance the tools to make plans for climate change impacts adaptation, improve climate resilience in management and use of land and water resources in some selected provinces of MKD:

- Develop database and information system; supplement and enhance institutional arrangements and policies for active management and administration in the context of Climate Change and Sea Level Rise in MKD.
- Build and upgrade infrastructure to enable effective management and administration in response to extreme climate change impacts.
- Gradually complete infrastructure for agriculture and aquaculture production, sector restructuring and development of new rural areas.
- Develop and complete irrigation systems to ensure effective response to extreme climate change impacts such as floods, droughts, salinity intrusion and to provide protection for people and production areas.
- Support improvement of livelihood, resilience of local communities to adverse climate change such as floods, droughts, salinity intrusion, environment pollution.

16. Specific tasks

- Provide institutional framework and aggregated information for multi-sectorial planning and effective management of Mekong Delta to: i) enhance resilience to climate risks, and develop and improve synergy between the stakeholders at provincial and delta-wise level; ii) enhance efficient use of monitoring tools and modern information technology to analyze scenarios for planning and operation, making investment decisions; and iii) strengthen capacity for multi-sectorial approach.
- Enhance resilience of agricultural and aquaculture sectors by i) strengthening management of water resources and flood retention measures; ii) supporting sustainable agriculture and aquaculture systems that can adapt to seasonal floods; and iii) enhancing market connectivity and competitiveness to improve livelihoods. Ensure connectivity, continuity and supplement investment projects having been being prepared for target study area.
- Respond to challenges related to salinity intrusion, erosion and sedimentation on rivers and canals, and improve livelihood of communities in coastal areas and estuaries through i) coastal protection measures against high tides and coastal erosion, sedimentation, protecting domestic economic activities; ii) investment in water management in enclosed and open systems; iii) strengthen capacity to recover and adapt to salinity intrusion with diversified agricultural and aquaculture systems; and iv) ensure supply of freshwater for domestic / commercial consumption in transition areas and coastal areas. Ensure connectivity, continuity and supplement investment projects having been being prepared for project area.
- Strengthen climate resilience of brackish water economic areas by i) restoring ecosystems to reduce coastal erosion and protect local economic activities; ii) strengthening capacity to recover and adapt to salinity intrusion with diversified agricultural and aquaculture systems; iii) providing freshwater for domestic consumption and iv) develop / improve coastal livelihoods as appropriate. Also in this task, they have to ensure connectivity, continuity and supplement investment projects having been being prepared for target study area.

1.3 Project area

17. The Project will be implemented in 3 basic ecological sub-zones in MKD: Floodplains, estuaries and peninsula. To be more precise, the Project will focus on 8 selected provinces: Floodplains (An Giang, Đồng Tháp), estuaries (Bến Tre, Trà Vinh, Sóc Trăng), and peninsula (Cà Mau, Kiên Giang).

1.4 Project Implementation Arrangements

18. Pursuant to Decree no. 38/2013/NĐ-CP dated 23/4/2013 by the Government on management and use of ODA funds and concessional loans, the Project will be implemented

and managed as an “umbrella” project, which has an executing agency responsible for project overall coordination and multiple sub-project owners.

19. At central level.

(a) Ministry of Agriculture and Rural Development (MARD) will be the project Executing Agency, responsible to the Government for overall Project implementation and coordination in compliance to commitments made to the donor and Government’s regulations on ODA fund management. MARD will also directly be sub-project owner of Sub-project 5 under Component 1 and Sub-project 2 and Sub-project 6 under Component 2 and 3.

(b) MARD established a Project Steering Committee (PSC) to provide guidance over project implementation. The PSC is chaired by a MARD leader, with members being representative leaders from Ministry of Natural Resources and Environment (MONRE), Ministry of Planning and Investment (MPI), project provinces, relevant departments and agencies under MARD, and Central Project Office (CPO).

(c) Construction Management Department (CMD) is a functional department that works with other advisory agencies to assist MARD in management, administration, guidance, supervision of civil works, and appraisal of relevant contents under Sub-project 2 and Sub-project 6 under Component 2 and 3.

(d) International Cooperation Department (ICD) acts as the focal point between MARD and donor with overall responsibility for project implementation as complied with Financing Agreement, as well as for guiding, monitoring, evaluating, compiling periodical reports to MARD about project management and implementation.

(e) Planning Department helps Executing Agency in general planning and making budget plan, annual reporting, monitoring, project evaluation against approved schedule, performance and targets.

(f) Department of Finance, Department of Personnel, Department of Science, Technology and Environment, Directorate of Water resources, Directorate of Forestry, Directorate of Fisheries, Department of Plantation, and related agencies perform the state management function, advising MARD in managing, supervising, and inspecting project activities in accordance with their assigned functions and duties

(g) Central Project Office (CPO) under MARD will be the Project Owner, responsible for overall coordination, management of project activities, and will provide guidance, supervision over sub-project implementing agencies; CPO will also directly be the owner of Sub-project 5 under Component 1.

(h) When CPO and Departments of Agriculture and Rural Development (DARDs) in project provinces carry out technical activities that involve transfer to less water-intensive crops, aquaculture and fishery models, mangrove plantation and restoration combined with

aquaculture farming etc. in order to improve value chains, promote sustainable development, climate change adaptation, they should consult with: MARD's Department of Plantation, Department of Plant Protection, Directorate of Fisheries, Directorate of Forestry, Institute for Agriculture and Rural Development Strategies and Policies and National Center for Agriculture Extension etc.

i) Irrigation Construction Management Board No10 will be project owner of Sub-project 1 in Component 2, Sub-project 6 in Component 3.

k) Ministry of Natural Resources and Environment (MONRE) will be executing agency of Component 1 and owner of Sub-project 1, Sub-project 2, Sub-project 3, Sub-project 4 under Component 1.

l) Ministry of Planning and Investment (MPI) will be owner of Sub-project 6 under Component 1.

m) MONRE, MPI will make arrangements for preparation, appraisal, approval, implementation and final accounting of sub-projects assigned to them as in para. k) l) of this Article so as to ensure investment compliance and efficiency, and will closely work with MARD in project implementation.

20. At local level.

a) Provincial People's Committees (PPC) in project provinces will be executing agencies (investment decision maker) of sub-projects within their jurisdiction. PPC will: organize sub-project investment preparation; consult with MARD before approving sub-projects or making changes to sub-project investment reports; provide counterpart fund in timely and adequately manners for implementation of the tasks assigned to them; approve Environment and Social Impacts Assessment, Environment and Social Management Plans, Resettlement Action Plans, Ethnic Minority Development Plan (if any); conduct final accounting after sub-project completion; make investment decision, provide budget, arrange implementation and final accounting of land compensation, resettlement within their province.

b) PPC assigned their DARD as sub-project owner to manage and implement sub-projects in their province.

c) During project implementation, all stakeholders will adhere to Project Operation Manual endorsed by WB and approved by MARD, MONRE.

1.5 List of proposed sub-projects under Components 1, 2, 3, 4

21. Ten (10) sub-projects were proposed, 04 of which in the first implementation year.

Ref.	Sub-project	Location/ Executing agency	WB fund	Total investme nt	Implemet ing Agency
I	Component 1: Strengthen Monitoring, Analysis and Information Data Base		56,527	61,290	
HP1-1	Investment on upgrade and completion of surface water resources monitoring and observation network in MKD	13 MKD provinces/ MONRE	9,500	10,500	PMU - MONRE
HP1-2	Upgrade, construct groundwater resources monitoring and observation network in MKD in context of climate change	13 MKD provinces/ MONRE	10,000	12,000	PMU - MONRE
HP1-3	Develop a monitoring and observation network over coast and river bank movements in MKD, using remote sensors.	13 MKD provinces/ MONRE	11,000	12,000	PMU - MONRE
HP1-4	Investment to construct a MKD Center to house integrated data related to water resources and environment for analyzing, assessing and informing decision makers about sustainable development in context of climate change	13 MKD provinces/ MONRE	13,800	14,453	PMU - MONRE
HP1-5	Enhance forecast capacity for management and operation of hydraulic works in MKD	13 MKD provinces/ MARD	2,527	2,537	CPMU
HP1-6	Comprehensive development of infrastructure, in response of climate change, for socio-economic development in MKD	13 MKD provinces/ MPI	9,700	9,800	PMU - MPI
II	Component 2 – Managing floods in upper delta		79,138	100,909	

Ref.	Sub-project	Location/ Executing agency	WB fund	Total investme nt	Implemet ing Agency
Sub- projec t 1	Enhancing the ability of flood drainage and climate change adaptation for the Long Xuyen Quadrangle	An Giang, Kiên Giang/ MARD	29,319	40,571	ICMB 10
Sub- projec t 2	Enhancing the ability of adaptation and water management for the upper part of Bassac River in An Phu district An Giang province	An Giang	24,222	30,522	PPMU An Giang 1st-year sub- project
Sub- projec t 3	Improving the ability of flood drainage and developing sustainable livelihoods, climate change adaptation in the Plain of Reed (the northern districts of Dong Thap province)	Đồng Tháp	25,597	29,816	PPMU Dong Thap
III	Component 3 – Adapting to Salinity Transitions in the Estuary		81,592	107,075	
Sub- projec t 4	Infrastructure to develop sustainable livelihoods for people in the coastal area in Ba Tri, Ben Tre to adapt to climate change	Bến Tre	12,055	13,934	PPMU Ben Tre 1st-year sub- project
Sub- projec t 5	Infrastructure to improve livelihoods for people and to adapt to climate change in the North Thanh Phu district, Ben Tre province	Bến Tre	12,887	23,766	PPMU Ben Tre

Ref.	Sub-project	Location/ Executing agency	WB fund	Total investment	Implementing Agency
Sub-project 6	Regulating water resource, adapting to climate change in district of Cau Ke (Tra Vinh province), Tra On and Vung Liem (Vinh Long province)	Trà Vinh, Vĩnh Long/MAR D	27,618	33,485	ICMB10 1st-year sub- project
Sub-project 7	Infrastructure for production transition in accordance with ecological conditions, improving livelihoods, adaptation to climate change in Dung island	Sóc Trăng	29,032	35,890	PPMU Soc Trang
IV	Component 4 – Protecting Coastal Areas in Delta Peninsula		81,893	101,148	
Sub-project 8	Infrastructure to prevent coastal erosion, supply fresh water and for production of shrimp - forest model to improve livelihoods and adapting to climate change in the coastal area of Ca Mau Province	Cà Mau	29,491	35,026	PPMU Ca Mau
Sub-project 9	Infrastructure to prevent coastal erosion and to support for aquaculture production in An Minh and An Bien districts	Kiên Giang	27,760	33,070	PPMU Kien Giang 1st-year sub- project
Sub-project 10	Infrastructure for ecological forest protection and development, livelihood improvement, and climate change adaptation in Hoa Binh, Dong Hai, Phuoc Long and Hong Dan districts	Bạc Liêu	24,642	33,052	PPMU Bac Lieu

1.6 Project Implementation Plan

22. The following sub-projects have been selected for the first implementation year in Components 2,3,4: Sub-project 2 in An Phu, An Giang, Subproject 4 in Ba Tri, Ben Tre, Subproject 6 in Tra Vinh - Vinh Long, and Subproject 9 in An Minh - An Bien district, Kien Giang. These subprojects have their basic designs prepared and satisfy safeguard policies required by the donor. The remaining sub-projects will continue to be prepared and put into implementation in next phases.

Year 2016 - 2017

- Mobilize consultants for: project implementation support; independent monitoring; safeguard monitoring; first 3 years financial audit; internal audit; construction supervision of 4 first-year subprojects; review and amendment of contents related to construction of a Mekong Delta Centre; review of investments in monitoring of surface water, groundwater, land subsidence and landslides; preparation of project outline for integrated development of infrastructure in response to climate change;
- Implement project management capacity building and training activities;
- Implement construction activities for the 4 selected sub-projects.

Year 2017 - 2022

- Mobilize consultants for: Preparation of feasibility studies, detailed designs, supervision of construction and equipment installation for sub-projects;
- Continue to implement activities for institution development, coordination mechanisms and planning management, construction of measuring stations and monitoring systems;
- Develop database and equipment for establishing a monitoring network.
- Continue researches and application of technologies for upgrading dykes and embankments, tide control sluices, and infrastructure serving livelihoods in floodplains, estuaries, coastal areas in Ca Mau Peninsula;
- Carry out training and communication activities at various management levels and community;
- Implement procurement and construction activities for the remaining sub-projects.

1.7. Project Consultant Services

23. Consultants at project level

- Project Implementation Support Consultant (PIC): PIC will support project management in implementation of all aspects and activities, including livelihood transformation model in adaptation to climate change.

- Monitoring and Evaluation (M&E) Consultant: M&E Consultant will be selected to conduct M&E and evaluate achievement progress of projects result indicators each year and at the end of the project, based on the Project Outcomes Framework. This consultant will develop, operate and provide guidance for implementing agencies to run a project M&E system. The consultant will submit annual M&E report, Mid-Term M&E report and Completion M&E report.
- Independent Audit Consultant. This consultant will audit all project activities by PPMUs, CPMU, PMU of ICMB10, MPI PMU and MONRE PMU and prepare annual audit report, which must comply to IDA policies and provisions in the Financing Agreement
Internal Audit Consultant: This consultant will help project owners develop and operate internal audit systems to control project activities in line with regulations. To accomplish this task, project owner will recruit audit consultants to support, guide and train staff in the first year of the project.
- Independent Monitoring Consultant for project safeguard compliance and fiduciary compliance: To ensure that project implementation in provinces comply with government regulations as well as IDA policies, CPMU will hire a local consultant team to independently monitor all project activities, including procurement, contract management (including progress monitoring and quality control), financial management and disbursement, and implementation of RAP, EMP, EMDP/ECOP, ensure compliance with policies and meet the project implementation schedule. The consultant will submit monitoring reports before periodical Bank supervision missions.

24. Consultant services at sub-project level: These consultant services are expected to be selected and administered by PMU-MONRE, PMU-MPI, and provincial PMUs:

- PMU-MONRE will mobilize consultants to collect and analyze data on coastal changes using remote sensing technology;
- Consultants preparing FSs and detailed designs: PMUs will hire consultants to complete detailed designs for first-year subprojects and FSs for later subprojects. Design consultants can assist PMUs in the bidding process until contracts can be awarded for construction works.
- Construction Supervision Consultant: PPMU in each province has responsibility for overall implementation of works or sub-projects in that province. PPMUs will follow Vietnam's standards to hire local consultant team for independent monitoring of all construction activities (both quantity and quality), to ensure compliance with technical standards, implementation of EMP/ ECOP, ensure compliance with policies and meet project schedule;

- Environmental Management Consultants (EMC): An EMC will be recruited for each subproject to monitor implementation of subprojects ESMP during project implementation;
- In addition, a number of individual consultants will be hired to assist PMU-MONRE / PMU-MPI / PMUs in project implementation.

1.8. Project area

25. The Project will be implemented in 3 basic ecological sub-zones in MKD: Floodplains, estuaries and peninsula. To be more precise, the Project will focus on 8 selected provinces: Floodplains (An Giang, Đồng Tháp), estuaries (Bến Tre, Trà Vinh, Sóc Trăng), and peninsula (Cà Mau, Kiên Giang).

1.9. Project Monitoring and Evaluation Framework

26. The project monitoring and evaluation system will assist project management by monitoring and evaluating project progress, outputs, outcomes and impacts of 4 components

27. As presented in the Project Appraisal Document, the project result and monitoring framework is shown below:

Project Development Objective (PDO): To enhance tools for climate-smart planning, and improve climate resilience of land and water management practices in selected provinces of the Mekong Delta in Vietnam.

PDO Level Results Indicators	Core	Unit of Measure	Baseline	Target Values						Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description
				2016	2017	2018	2019	2020	2021				
PDO Indicator One: Adoption of Mekong Climate Resilience Assessment by MONRE	<input type="checkbox"/>	Score (0-4)	0	0	1	2	3	4	4	Annual	Review of tools and their adoption based on the scoring	MONRE M&E function	See Definition 1
PDO Indicator Two: Area with climate resilient land and water management practices supported by the project	<input type="checkbox"/>	Ha	0	0	0	30,000	100,000	170,000	200,000	Annual	Field survey in project areas	MARD M&E function	See Definition 2
PDO Indicator Three: Project supported farm households who have adopted climate resilient land and water management practices	<input type="checkbox"/>	%	0	0	0	10	25	50	75	Annual	Reports / Field survey in project areas	MARD M&E function	See Definition 3
PDO Indicator Four: Direct project beneficiaries, (of which female)	<input checked="" type="checkbox"/>	Number (%)	0	0.02 M (40%)	0.1 M (40%)	0.4 M (40%)	0.7 M (40%)	0.9 M (40%)	1.2 M (40%)	Annual	Field survey in project areas	MARD M&E function	See Definition 4.
PDO Indicator Five:	<input type="checkbox"/>	Number	0	0	0	15,000	25,000	35,000	35,000	Annual	Review of report	MARD	See

Citizens in selected provinces who participated in consultations on formulation of district land use plans											of consultations	M&E function	Definition 5
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Intermediate Results Indicators	Core	Unit of Measure	Baseline	Cumulative Target Values						Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description
				2016	2017	2018	2019	2020	2021				
Component 1: Enhancing Monitoring, Analytics, and Information Systems													
<i>Intermediate Results Indicator</i> <u>1.1:</u> Mekong Delta Center established and operational	<input type="checkbox"/>	Yes/No	No	No	No	Yes	Yes	Yes	Yes	Annual	Review of legal documents; Direct observation	MONRE M&E function	See Definition 1.1; Annual target
<i>Intermediate Results Indicator</i> <u>1.2:</u> Specialized Studies to facilitate climate resilient decision making supported by the project	<input type="checkbox"/>	Number	0	0	0	0	1	3	4	Annual	Review and quality assessment of specialized studies	MONRE M&E function	See Definition 1.2; Annual target
<i>Intermediate Results Indicator</i> <u>1.3:</u> Monitoring stations established or upgraded through project support, and fully operational	<input type="checkbox"/>	Number	0	0	0	10	30	50	50	Annual	Review of weekly data from monitoring stations and count of stations operational	MONRE M&E function	See Definition 1.3; Cumulative target
Component 2: Managing Floods in the Upper Delta													

<u>Intermediate Results Indicator</u> 2.1: Project supported farm households in selected provinces transitioned to third rice crop alternatives	<input type="checkbox"/>	%	0	0	0	20	30	50	75	Annual	Field survey of land and water management practices	MARD M&E function	See Definition 2.1; Annual target.
<u>Intermediate Results Indicator</u> 2.2: Flood retention areas with water management infrastructure supported by the project	<input type="checkbox"/>	Ha	15,800	0	0	≥ 15,800	≥ 15,800	≥ 15,800	≥ 15,800	Annual	Field survey of land and water management practices	MARD M&E function	See Definition 2.2; Annual target.
<u>Intermediate Results Indicator</u> 2.3: August dikes rehabilitated and operational supported by the project	<input type="checkbox"/>	Km	0	0	0	15	45	61	61	Annual	Review of technical inspection reports upon completion of works	MARD M&E function	See Definition 2.3; Cumulative target.
<u>Intermediate Results Indicator</u> 2.4: August dike sluice gates constructed and operational supported by the project	<input type="checkbox"/>	Number	0	0	0	5	10	15	15	Annual	Review of technical inspection reports upon completion of works	MARD M&E function	See Definition 2.4; Cumulative target.
Component 3: Adapting to Salinity Transitions in the Delta Estuary													
<u>Intermediate Results Indicator</u> 3.1: Farm households in selected provinces who have transitioned to climate resilient alternatives livelihoods supported by the project disaggregated by: • Estuary Provinces;	<input type="checkbox"/>									Annual	Field survey of land and water management practices	MARD M&E function	See Definition 3.1; Annual target.

<ul style="list-style-type: none"> Peninsula Provinces. 		%	0	0	0	20	30	50	75			
<p><u>Intermediate Results Indicator</u> <u>3.2:</u> Brackish water aquaculture area with sustainable and climate resilient infrastructure supported by the project disaggregated by</p> <ul style="list-style-type: none"> Estuary Provinces Peninsula Provinces. 	<input type="checkbox"/>	Ha	0	0	0	0	10,000	30,000	45,000	Annual	Field survey of land and water management practices	MARD M&E function See Definition 3.2; Annual target.
<p><u>Intermediate Results Indicator</u> <u>3.3:</u> River bank and coast line protection supported by the project:</p> <ul style="list-style-type: none"> Coastal dike River bank Embankment 	<input type="checkbox"/>	Km	0	0	0	15	15	15	15	Annual	Review of technical inspection reports after completion of works	MARD M&E function See Definition 3.3 Cumulative target.
				0	0	20	30	50	75			
				0	0	20	30	50	75			

<u>Intermediate Results Indicator</u> <u>3.4:</u> River Bank and coastal sluiceways constructed and operational through project support	<input type="checkbox"/>	Number	0	0	0	3	3	4	6	Annual	Review of technical inspection reports after completion of works	MARD M&E function	See Definition 3.4; Cumulative target.
Component 4: Protecting Coastal Areas in the Delta Peninsula													
<u>Intermediate Results Indicator</u> <u>4.1:</u> Coastline protection through project support	<input type="checkbox"/>	Km	0	0	0	0	10	10	10	Annual	Review of technical inspection reports after completion of works	MARD M&E function	See Definition 4.1; Cumulative target.
<u>Intermediate Results Indicator</u> <u>4.2:</u> Coastal sluice gates constructed and operational through project support	<input type="checkbox"/>	Number	0	0	0	0	3	6	9	Annual	Review of technical inspection reports after completion of works	MARD M&E function	See Definition 4.2; Cumulative target.
<u>Intermediate Results Indicator</u> <u>4.3:</u> River bank and coast line protection supported by the project: <ul style="list-style-type: none"> • Coastal dike • River bank • Embankment 	<input type="checkbox"/>	Km	0	0	0	10	10	10	20	Annual	Review of technical inspection reports after completion of works	MARD M&E function	See Definition 4.3 Cumulative target.
				0	0	10	20	30	30				
				0	0	10	20	30	50				

PDO Level Results Indicators

Definition 1. The Mekong Climate Resilience Assessment will be adopted by MONRE. The ministry will develop a set of key environmental and socioeconomic indicators related to MKD sustainability and then assess the status, trends, and driving factors related to those indicators. The assessment will also identify any data or knowledge gaps and provide a set of recommendations related to the next planning cycle for adaptive management of the delta. This assessment will help mainstream climate issues into the next round of planning (2021–2025), namely (a) the MPI’s Mekong Delta Socioeconomic Plan; (b) sectoral master plans; and (c) provincial land-use plan. The indicator will be measured as an index (a score of 0–4) based on stages, that is, data collection, drafting, consultation, finalization, and adoption by MONRE. Therefore, the targets are the following:

- 0 - No action
- 1 - Data for preparing a draft assessment is collected
- 2 - Stakeholder consultation to discuss a draft assessment is carried out
- 3 - Assessment is finalized for submission to MONRE review
- 4 - Assessment is adopted by MONRE

Definition 2. It is the responsibility of MONRE to prepare and approve (a) the water resources planning for interprovincial river basins and water resources, according to the guidelines described in the Vietnamese Law on Water Resources (updated 2012) and (b) the national land-use planning according to the guidelines described in the Land Law (updated 2013) and through this, promote climate-resilient land and water management practices, including aquaculture/extensive aquaculture, floating vegetables, floating rice, extensive farm fishing (stocking, harvesting), biosecurity shrimp farming, mangrove shrimp, salient tolerant rice, and so on. The project-supported areas where climate-resilient land and water management practices are adopted will be monitored through field surveys during implementation.

Definition 3. Climate-resilient land and water management practices are defined under Definition 2. Adoption of these practices means that the farm households are using them for all crop cycles in a year.

Definition 4. The number of households that belong to PDO Indicator 4 (project-supported farm households) will be determined, and the number will be multiplied by an average household size of five people, to estimate the number of people benefitting under the project. The number of beneficiary households will be monitored during implementation.

Definition 5. Approximately 5,000 citizens per district participate in consultations in the development or update of a district land-use plan.

Component 1: Enhancing Monitoring, Analytics, and Information Systems

Definition 1.1. The Mekong Delta Center is considered established when the building is constructed, a director is appointed, and there are dedicated staff working in the center. The target for the establishment is year 3 of the project. It is considered operational when a GIS-based knowledge management platform is functional and staff can extract information on land-use, surface water, and groundwater monitoring data. The center's operation will be achieved in year 5 of the project.

Definition 1.2. Specialized studies shall include the following: (a) MONRE Groundwater Survey; (b) MARD Sea Dike and Mangrove Study; (c) MONRE River and Coastal Morphology Study; and (d) MARD Hydraulic Operations Study.

Definition 1.3. The number of monitoring stations are calculated as follows: (a) 20 new or upgraded Department of Water Resources water quality monitoring stations measuring water quality and quantity with automatic transmission of data and (b) 30 new or upgraded National Center for Water Resources Planning Investigation (NAWAPI) monitoring sites (which may include multiple observation wells) measuring water quality and level with automatic transmission of data. To be considered functional, there must be reports on data collected.

Component 2: Managing Floods in the Upper Delta

Definition 2.1. Subprojects to be implemented include introduction of new agricultural/aquaculture cropping alternatives to the wet season third rice crop. Sustainable alternatives for farm households include aquaculture (fish and freshwater prawns); floating vegetables (for example, morning glory); floating gardens (for example, to produce tomatoes); floating rice; extensive farm fishing (stocking and harvesting); and others. The number of farming household transitions will be monitored by field surveys during implementation and reported.

Definition 2.2. Subprojects to be implemented include water and agricultural infrastructure investments that align with the natural flooding schemes in the MKD and contribute to maintaining and expanding water retention capacity for controlled flooding in rural areas during the flood season (July–December). The water management infrastructure includes a combination of reinforced low embankments (such as ‘August dikes’– as in Definition 2.3) and small-scale sluice gates.

Definition 2.3. Also, see Definition 2.2. August dikes are defined as low dikes that hold water until the flood season. The height is generally lower than the peak of the annual average flood, but the dikes protect the double-crop rice production from early and late seasonal floods. August dikes facilitate soil fertility through accumulation of sediments during the flood season, which starts in July/August, when water will overflow these dikes. However, the overtopping of the dikes causes high yearly maintenance costs for farm households, as the dikes are heavily damaged during overflow.

Definition 2.4. Also, see Definition 2.2. Sluice gates that reduce maintenance costs for the August dikes caused by damage from overtopping, by facilitating a more gradual inflow of water during the flood season.

Component 3: Adapting to Salinity Transitions in the Delta Estuary

Definition 3.1. This indicator measures progress for activities supported under Components 3 and 4:

- Subprojects to be implemented under Component 3 include support for agriculture-aquaculture alternatives to freshwater-based production models, which adapt to changing salinity levels. Sustainable alternatives for farm households include extensive aquaculture (fish and freshwater prawns), biosecurity shrimp farming, mangrove shrimp, salient tolerance rice varieties, and so on.
- Subprojects to be implemented under Component 4 include support for agriculture-aquaculture alternatives to intensive shrimp farming production models. Alternative livelihoods include mangrove shrimp, aquaculture with carnivorous and herbivorous fish and intensive/extensive shrimp and more saline tolerant crops, and freshwater-based rice or prawn production, including biosecurity measures to protect from entry and spreading of pests and diseases.

The number of farming household transitions will be monitored by field surveys during implementation.

Definition 3.2. This indicator measures progress for activities supported under Components 3 and 4:

- Climate-resilient investments in sustainable (fresh and saline) water management infrastructure supported under Component 3 are those which are designed to consider changing boundary conditions, for example, salinity intrusion, freshwater availability, sea-level rise, storm surges, river floods, and so on through circulation-based irrigation systems for agriculture (rice) and aquaculture with separated water intake and disposal and, where possible, linked to mangrove regeneration.
- Given the freshwater balance and the level of salinity intrusion, it is critical that investments in water management infrastructure are based on principles for sustainable water management and land use and proper zoning into the mangrove belt, brackish-water zone, intermittent zone, and freshwater areas. Investments under Component 4 aim to establish a cascading system for more intensive aquaculture, with no direct discharge into the extensive pond system. For the intermittent zone and the freshwater zone, freshwater needs to be ensured in the long term and in very dry years. The long-term sustainability depends on the strategic positioning of intake and discharge points to minimize

pollution risk.

Definition 3.3. Riverbank, coastline, and embankment investment measures aim to protect the coastline and/or riverbanks from erosion and salinity intrusion in farming areas. These investments can be structural (for example, sea dikes and river embankments) and/or nonstructural (for example, restoration or expansion of mangrove forest belts or other ‘building with nature’ type solutions). The investments need to be closely aligned and integrated with investments in water management infrastructure as mentioned under Definition 3.2 to avoid conflicts of interest in (fresh and saline) water supply at compartment levels. Based on the results of the Component 1 MARD Sea Dike and Mangrove Study and the MONRE River and Coastal Morphology Study, subsequent projects for strengthening selected areas will be included.

Definition 3.4. Investments in coastal sluice gates aim to protect livelihoods for damage resulting from flooding caused by sea-level rise combined with high tides during the dry season (Jan-Apr) and/or storm surges. Initial investments are for the coast of Ben Tre. Investments in Tra Vinh will be implemented only after experiences gained through the MTR. In principle, the operational regime is such that the sluice gates are being kept open year-round to avoid a conflict of interest with proposed transition toward agriculture-aquaculture alternatives, which adapt to changing salinity levels (see Definition 3.1). River sluice gates aim to protect valuable horticulture areas from damage caused by increasing salinity.

Component 4: Protecting Coastal Areas in the Delta Peninsula

Definition 4.1. See Definition 3.3. Of the 600 km of the total coastline for the MKD, only 10 km is determined to be strengthened under the first year project for Kien Giang. Based on the results of the Component 1 MARD Sea Dike and Mangrove Study, subsequent projects for strengthening selected coastal areas will be considered at the MTR.

Definition 4.2. Investments in coastal sluice gates aim to protect livelihoods for damage resulting from flooding caused by sea-level rise combined with high tides during the dry season (January–April) and/or storm surges. In principle, the operational regime is such that the sluices are being kept open year-round to avoid a conflict of interest with the aimed-for transition toward agriculture-aquaculture alternatives to intensive shrimp farming (see Definition 3.1). The location of the sluice gates needs to be aligned with the investments in the cascading water management system, as described in Definition 3.2.

Definition 4.3: See Definition 3.3

2. OBJECTIVES

28. The main objective of this consultant service is to assist project management units (Central Project Management Unit Central – CPMU - and sub-project's management units - MONRE-PMU, MPI-PMU, ICMB10 and PPMUs) in implementing Monitoring and Evaluation (M&E) Framework and assess impacts, benefits, sustainability and relevance of the project. The Consultant will prepare monitoring and evaluation reports, including Inception Report, regular reports, mid-term report and final report, irregular project's impact assessment report.

3. SCOPE OF WORKS

29. Scope of works to be provided in this Consultant service includes:

- Review available project documents, work with CPMU to agree on and propose detailed work plan and schedule for the consultant service;
- Conduct surveys and data collection for a number of project impact assessment reports during the consultant service;
- Develop an M&E system, M&E tool kits as suitable for conditions in provinces; the system should be designed to serve the purpose of monitoring, evaluation and reporting on activities being implemented;
- Develop a project Monitoring & Evaluation Manual;
- Develop an M&E framework; M&E plan and indicators; develop forms for monitoring result indicators;
- Provide guidance and training for project staff at all levels: understand project M&E framework, conduct reporting through M&E system to be developed, evaluation methods in stages and support CPMU in all training activities related to M&E;
- Be responsible for monitoring implementation progress and assessing impacts of the entire project.

4. SPECIFIC TASK

Task 1: Inception report/ Preparing work plan

30. The consultant will study all project requirements and regulations of Vietnam Government related to project monitoring and evaluation. Available project documents include Financing Agreement (FA), Project Appraisal Document (PAD), Project Operation Manual (POM), project progress reports, M&E framework and related documents. The Consultant also need to preliminary assess capacity of project management units, refer to M&E systems of other projects and base on which to propose technical approaches and methodologies to assess each indicator in M&E framework, detailed work plans and implementation schedule of activities, and plans for strengthening capacity of officials in charge of M&E, milestone and staff inputs to deliver the consultant service.

Task 2: Collect/Analyze baseline data

31. To obtain updated information for mid-term review report and final report, the Consultant should conduct surveys, collect data in 3 phases (baseline, mid-term and final),

surveys must cover all project objectives and output indicators outlined in the monitoring and evaluation framework. These surveys should use participatory methods. Detailed survey plan in each phase and the number of samples to be collected should be endorsed by CPMU in advance.

Task 3: Develop Project Monitoring and Evaluation Manual

32. Based on study of project documents and Vietnam laws, the Consultant will develop a project monitoring and evaluation manual, which includes: (i) guidelines on methods to collect data, assess each result indicator of the project; (ii) schedule and contents of reports as requested by the donor and Vietnam laws. This manual should be endorsed by CPMU.

Task 4: Develop and maintain an M&E system

33. The Consultant prepare data collection forms/ templates to collect data through surveys for regular reports. Data collected information collected by the survey form should be enough to analyze and assess relevance, effectiveness and sustainability of the project. Also, at the request of the donor, such forms should include information to assess level of green house gas (GHG), recovery of livelihoods for affected households as result of resettlement action plan and ethnic minorities development plan for subprojects.

- Prepare a report template to help sub-projects in collecting and updating data for monitoring and evaluation by the Consultant;

- Develop different forms for each type of report such as quarterly reports, semiannual reports and annual reports and irregular reports at the request of CPMU;

- Organize training for Project Management Units on reporting as required by project M&E framework and result matrix;

- Compile and prepare semi-annual and annual reports;

- Prepare project M&E reports as stipulated in Decree no.16/2016/ND-CP of the Government dated 16/3/2016 and instructive documents;

- Support Project Management Units in preparing M&E reports as prescribed by the Government (at Decree no.16/2016/ND-CP of the Government dated 16/3/2016).

Task 5: Project Review Report/ Project Completion Report

34. The Consultant will also prepare two monitoring reports with assessment of results indicators: project mid-term report (after 2nd survey and data collection) and project completion report (after final survey and data collection).

(i) Mid-term Report: The Consultant will use available analysis results to assess the project's results against criteria: relevance, efficiency, effectiveness, sustainability. Economic and finance analysis should also be prepared for project mid-term report in consultation with project management units and PIC. Contents of the mid-term report will include: (a) confirmation of relevance of project development objectives (PDO) and overall assessment of implementation results, (b) qualitative and quantitative assessment of each

indicator in the result framework, (c) detailed assessment of project impacts on its stakeholders, (d) assessment for recommendations about feasibility of achieving the project result indicators in the remaining time of the project; (e) implementing safeguard measures as required by the donor; (f) reduction of greenhouse gas emissions; (g) financial management and procurement. The Consultant will conduct detailed interviews/ assessment with direct stakeholders, particularly groups that are more vulnerable to climate change, upstream development, and conflict of interest among project beneficiaries (e.g. freshwater versus saltwater, rice versus fruit, rice versus shrimp etc.).

(ii) Project Completion Report: The Consultant will review and evaluate overall project design of its relevance, sustainability and efficiency in project implementation, organization and management, M&E of project executing and implementing agencies and World Bank team. This review should be based on survey results, project documents as well as discussions with officials directly implementing the project, key consultants at both central and provincial levels. The Consultant will evaluate details for each result indicator of the project on the following aspects: (i) relevance: the extent to which project objectives and strategies are relevant to the overall development goals of the region and the country as well as the extent to which the project was designed, including risk mitigation measures in consistence with its objectives (evaluation should be both quantitative and qualitative); (ii) efficiency: evaluate the project design and achievement compared to its objectives and benefits compared to project input and costs and time, including effectiveness of risk mitigation measures; (iii) sustainability - assess continuity and analyze potential risks related to livelihood activities.

5. KEY OUTPUTS OF THE CONSULTANT SERVICE

35. The Consultant will submit the following reports to CPMU for approval. All reports will be submitted in 05 English copies and 05 Vietnamese copies, including electronic files of both languages.

No.	Report/ Document	Submission time
1	Inception report	1.5 months after contract signing date
2	Work plan for surveys, samples/templates of project quarterly/annual monitoring and evaluation reports	As scheduled in Inception Report and in actual progress
3	Project M&E Manual	
4	Baseline data survey report	
5	Mid-term report	
6	Regular/ quarterly/ semiannual/ annual monitoring reports	

7	Completion report	
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6. Required qualifications of consultant

37. The Monitoring and Evaluation (M&E) contract will be awarded to a consultant firm having full legal status, financial autonomy, meeting requirements for eligibility in Vietnam law and the project Financing Agreement, having minimum 10 years of experience in providing relevant consultancy services in project monitoring and evaluation; and having minimum 02 contracts in Monitoring and Evaluation of multi - purpose water resource infrastructure investment project with similar scope as in ICRSL project Relevant experience in projects funded by international financial organizations would be an advantage. The consultant team will have a team leader and co-team leader (national experts), who must have knowledge and experience in suitable fields. The consultant team will comprise local experts, with extensive experience in the country and other countries related to ICRSL project. International consultant firms are encouraged to form a joint venture or association with Vietnamese companies, to provide the skills and expertise needed to ensure overall success of the project, and achievement of the project development objectives. Qualifications and experience required of each team members are listed below. In addition to these staff, the consultant may be asked to provide short-term experts for field trips and for other requirements of the project. In addition to key technical staff, consultants should mobilize support staff, office administrators, interpreters...

The total estimated professional staff inputs are 260 staff months. This indicative estimation is for the consultant's reference, the consultant should consider and propose its own staffing plan to ensure the satisfactory performance of the assignment.

6.1 Required qualifications of key expert

Key professional staffs

38. *Senior expert in economics/ agricultural economics – Team leader (national¹):* Have master degree or higher in economics/ agricultural economics with 15 years of experience working in ODA projects of integrated water resources management; have experience in developing and implementing M&E, particularly knowledgeable about methods and approaches to M&E system and familiar with different M&E tools; have experienced training on operation of M&E system and project coordination; have experience in similar position in at least 3 projects or for 10 years; priority is given to experts having been involved in projects in Mekong Delta. In addition, the expert must be proficient in English, office computer skills and composing reports.

¹ National mean national experience

39. ***Monitoring and Evaluation expert – Co-team leader (national)***: Have master degree or higher in water resource management/ climate change/ or related majors, with at least 10 years of experience, specializing in monitoring and evaluation of international-fund projects; priority is given to experts having been involved in projects in Mekong Delta; have experience in similar position in at least 3 projects or for 8 years. The expert must be good at English, teamwork, and office computer skills.

40. ***Climate change expert (national)***: Have bachelor degree or higher in climate change/ disaster risk management/ water resources/ environment or related majors, with at least 10 years of experience in projects related to water resources management, climate change impacts, environmental management; have experience in analyzing, assessing climate change impacts on water resources management; Have experience in similar position in at least 3 projects or for 8 years. The expert must be good at English, teamwork, and office computer skills. Priority is given to experts with experience in the project area.

41. ***Hydraulic works expert (national)***: Have bachelor degree in hydraulic works/ water management with at least 10 years of experience in monitoring and evaluation of integrated water resources management projects; Have experience in similar position in at least 2 projects or for 5 years. The expert must be good at English, teamwork, and office computer skills. Priority is given to experts with experience in the project area.

42. ***Aquaculture experts (national)***: Have bachelor degree or higher in aquaculture with at least 10 years of experience in the field of aquaculture; have knowledge about aquaculture model being used in Mekong Delta; have experience implementing projects in aquaculture, conversion or pilot aquaculture model; Have experience in similar position in at least 2 projects or for 5 years. The expert must be good at English, teamwork, and office computer skills. Priority is given to experts with experience in the project area.

43. ***Agriculture expert (national)***: Have bachelor degree or higher in agriculture with at least 10 years of experience in the field of agriculture; have knowledge about new farming methods and integrated crop management, conditions and methods of cultivation in Mekong Delta provinces; have experience in designing farming model, disease management, post-harvest processing and storage; Have experience in similar position in at least 2 projects or for 5 years. The expert must be good at English, teamwork, and office computer skills. Priority is given to experts with experience in the project area.

Non- Key professional staffs

44. ***Forestry expert (national)***: Have bachelor degree or higher in forestry with 10 years of experience in the field of forestry; have knowledge about methods of planting mangrove for coastal protection and afforestation in shrimp ponds for implementing mangrove-shrimp production model in coastal provinces of Mekong Delta; Have experience in similar position in at least 2 projects or for 5 years; have good English and good office computer skills.

45. ***Social expert (national)***: Have bachelor degree or higher in social sciences/ water resources management, with at least 10 years of experience in consultant services monitoring and evaluation for project impacts, livelihood recovery after completion of international-fund projects; Have experience in similar position in at least 2 projects or for 5 years; good at English, teamwork, and office computer skills.

46. ***Statistics and analysis expert (national)***: Have bachelor degree or higher in economics/ water resources management/ social sciences, with expertise in analysis and statistics, and at least 10 years of experience in programs and/or projects using international fund; have experience in developing forms to collect and analyze statistical data; proficient at using specialized software; have knowledgeable about agriculture and rural development; Have experience in similar position in at least 2 projects or for 5 years; good at English, teamwork, and office computer skills.

47. ***Technical Support staff***: 04 staff with bachelor degrees and at least 3 years of experience in relevant majors.

6.2. Inputs and key tasks of each expert position

Position	Part/Full time	Tasks
1. Senior expert in economics/ agricultural economics – Team leader	Part time	<ul style="list-style-type: none"> - Coordinate the consultant team to ensure delivery of the consultant service as described above. - Manage and report progress to CPMU, work closely with WB staff, CPMU staff and other consultants, especially project implementation consultant (PIC) during this consultant service. - Prepare and submit reports to CPMU. - Take lead in development of an M&E system and maintain its operation. - Draft project M&E Manual and provide training on M&E system.
2. Monitoring and Evaluation expert – Co-team leader	Part time	<ul style="list-style-type: none"> - Support team leader in coordination of the consultant team. - Take lead in survey data collection. - Take part in preparation of M&E reports for each project component. - Support team leader in development of project M&E system, draft M&E Manual and training documents. - Responsible for monitoring and evaluation, support, analysis of relevant data. - Work with team leader and act as focal point in all communications with CPMU and PPMUs.
3. Climate change expert	Part time	<ul style="list-style-type: none"> - Responsible for M&E indicators of the whole project. - Take part in preparation of M&E reports for each project component. - Support team leader in development of project M&E system, draft M&E Manual and training documents.
4. Hydraulic works	Part time	<ul style="list-style-type: none"> - Responsible for baseline data and M&E indicators and evaluation of investments.

Position	Part/Full time	Tasks
expert		<ul style="list-style-type: none"> - Take part in preparation of M&E reports for each project component. - Support team leader in development of project M&E system, draft M&E Manual and training documents.
5. Aquaculture expert	Part time	<ul style="list-style-type: none"> - Responsible for baseline data and M&E indicators and evaluate the development of livelihood transformation models in aquaculture. - Take part in preparation of M&E reports for each project component. - Support team leader in development of project M&E system, draft M&E Manual and training documents.
6. Agriculture expert	Part time	<ul style="list-style-type: none"> - Responsible for baseline data and M&E indicators and evaluate the development of livelihood transformation models in agriculture. - Take part in preparation of M&E reports for each project component. - Support team leader in development of project M&E system, draft M&E Manual and training documents.
7. Forestry expert	Part time	<ul style="list-style-type: none"> - Responsible for baseline data and M&E indicators and evaluate the development of livelihood transformation models in forestry. - Take part in preparation of M&E reports for each project component. - Support team leader in development of project M&E system, draft M&E Manual and training documents.
8. Social expert	Part time	<ul style="list-style-type: none"> - Monitor and evaluate management-enhancing activities, results of civil works and capacity building. - Take part in preparation of M&E reports for each project component. - Support team leader in development of project M&E system, draft M&E Manual and training documents
9. Statistics and analysis	Part time	<ul style="list-style-type: none"> - Take part in development of M&E system, M&E Manual.

Position	Part/Full time	Tasks
expert		<ul style="list-style-type: none"> - Design forms to collect, analyze data; take part in M&E reporting. - Take part in developing training documents and organizing training activities.
10. Technical Support staff	Part time	<p>Programmers, website designers and admin, communication and consultation staff, training facilitators, accountants, translators, and office service staff.</p>

7. INFORMATION FOR CONSULTANT

48. Time and location:

+ Tentative time: 6/2017 – 12/2022

+ Tentative location: 13 Mekong Delta provinces including *Bến Tre, Vĩnh Long, Trà Vinh, Sóc Trăng, Đồng Tháp, An Giang, Kiên Giang, Bạc Liêu, Cà Mau, Long An, Tiền Giang, Hậu Giang and Cần Thơ city.*

49. Contract duration is expected to be from 6/2017 – 12/2022. In the first implementation year, for instance 2017, the Consultant will carry out Task 1 and Task 2, including field trips to project provinces for surveys, data collection, consultations, and providing guidance to stakeholders on operation of M&E system. The Consultant will prepare a detailed work plan, including staffing plan, which should comply with the above requirements, specifying man-month for each position.

50. Agencies related to performance of the consultant contract:

+ CPMU and PPMUs, shall submit to and circulate the consultant's reports to World Bank, Ministry of Agriculture and Rural Development, Ministry of Natural Resources and Environment, Ministry Planning and Investment and relevant authorities. The Consultant will be provided with other documents such as PAD, FS, RPF, EMDF, EMDPs, RAP and EMP/ ECOP of subprojects.

+ In CPMU's coordination, the Consultant will work with project implementing agencies under MONRE, MPI to collect some indicators in Component 1.

The Consultant is required to prepare contingency for all costs related to contract implementation, including office space, furniture, computers and other equipment, and computer software.

The Consultant will have to cover all expenses related to travel and accommodation (including field trips) for the whole team during contract implementation.

The Consultant will cover costs for all support staff, including secretaries, translators, maintenance staff and office service people.

The Consultant will be selected through QCBS (Quality and Cost Based Selection) method, and comply with The Guideline on Consultant Selection and Employment by Borrowers of World Bank, issued in 01/2011, revised in 7/2014, and World Bank standards on "Time-based contract".