

AFB/PPRC.23/16 24 September, 2018

Adaptation Fund Board
Project and Programme Review Committee
Twenty-third Meeting
Bonn, Germany, 9-10 October, 2018

Agenda Item 6 j)

**PROPOSAL FOR INDONESIA (4)** 

#### **Background**

- 1. The Operational Policies and Guidelines (OPG) for Parties to Access Resources from the Adaptation Fund (the Fund), adopted by the Adaptation Fund Board (the Board), state in paragraph 45 that regular adaptation project and programme proposals, i.e. those that request funding exceeding US\$ 1 million, would undergo either a one-step, or a two-step approval process. In case of the one-step process, the proponent would directly submit a fully-developed project proposal. In the two-step process, the proponent would first submit a brief project concept, which would be reviewed by the Project and Programme Review Committee (PPRC) and would have to receive the endorsement of the Board. In the second step, the fully-developed project/programme document would be reviewed by the PPRC, and would ultimately require the Board's approval.
- 2. The Templates approved by the Board (Annex 5 of the OPG, as amended in March 2016) do not include a separate template for project and programme concepts but provide that these are to be submitted using the project and programme proposal template. The section on Adaptation Fund Project Review Criteria states:

For regular projects using the two-step approval process, only the first four criteria will be applied when reviewing the 1st step for regular project concept. In addition, the information provided in the 1st step approval process with respect to the review criteria for the regular project concept could be less detailed than the information in the request for approval template submitted at the 2nd step approval process. Furthermore, a final project document is required for regular projects for the 2nd step approval, in addition to the approval template.

- 3. The first four criteria mentioned above are:
  - (i) Country Eligibility,
  - (ii) Project Eligibility,
  - (iii) Resource Availability, and
  - (iv) Eligibility of NIE/MIE.
- 4. The fifth criterion, applied when reviewing a fully-developed project document, is: (v) Implementation Arrangements.
- 5. It is worth noting that at the twenty-second Board meeting, the Environmental and Social Policy (ESP) of the Fund was approved and at the twenty-seventh Board meeting, the Gender Policy (GP) of the Fund was also approved. Consequently, compliance with both the ESP and the GP has been included in the review criteria both for concept documents and fully-developed project documents. The proposal template was revised as well, to include sections requesting demonstration of compliance of the project/programme with the ESP and the GP.
- 6. At its seventeenth meeting, the Board decided (Decision B.17/7) to approve "Instructions for preparing a request for project or programme funding from the Adaptation Fund", contained in the Annex to document AFB/PPRC.8/4, which further outlines applicable review criteria for both

concepts and fully-developed proposals. The latest version of this document was launched in conjunction with the revision of the Operational Policies and Guidelines in November 2013.

- 7. Based on the Board Decision B.9/2, the first call for project and programme proposals was issued and an invitation letter to eligible Parties to submit project and programme proposals to the Fund was sent out on April 8, 2010.
- 8. According to the Board Decision B.12/10, a project or programme proposal needs to be received by the secretariat no less than nine weeks before a Board meeting, in order to be considered by the Board in that meeting.
- 9. The following project concept document titled "The adaptation measures to support sustainable livelihoods for local communities in mangrove ecosystem in the Mahakam Delta, East Kalimantan" was submitted for Indonesia by the Partnership for Governance Reform in Indonesia (Kemitraan), which is the National Implementing Entity of the Adaptation Fund.
- 10. This is the second submission of the proposal using the two-step submission process. It was first submitted in the thirtieth meeting and the Board decided:
- (a) Not to endorse the project concept, as supplemented by the clarification response provided by the Partnership for Governance Reform in Indonesia (Kemitraan) to the request made by the technical review:
- (b) To suggest that Kemitraan reformulate the proposal considering the observations in the review sheet annexed to the notification of the Board's decision, as well as the following issues:
  - (i) All updated information in response to the previous technical review should be included in the project document, such as the mechanism for seedling services and how benefits related to non-mangrove products will be distributed in a gender-sensitive manner and involving the most vulnerable groups to ensure there is no 'dis-adoption' of envisaged initiatives;
  - (ii) The proposal should provide information and lessons learned on the mangrove rehabilitation program that have informed the design of the proposed project;
  - (iii) The proposal should provide more clarity on the concept of silvofishery;
  - (iv) The proposal should include the cost justification for the project, and clarify the project's sustainability by explaining the replicability and scalability of the envisaged adaptation activities and benefits of the project;
  - (v) The proposal should ensure that the environmental and social risks associated with the proposed activities have been adequately identified, and that the risk findings in the concept note have been substantiated;

- (c) Not to approve the project formulation grant of US\$ 30,000; and
- (d) To request Kemitraan to transmit the observations under subparagraph (b) above to the Government of Indonesia.

(Decision B.30/8)

- 11. The current submission was received by the secretariat in time to be considered in the thirty-second Board meeting. The secretariat carried out a technical review of the project proposal, assigned it the diary number IDN/NIE/Food/2017/2, and completed a review sheet.
- 12. In accordance with a request to the secretariat made by the Board in its 10th meeting, the secretariat shared this review sheet with Kemitraan, and offered it the opportunity of providing responses before the review sheet was sent to the PPRC.
- 13. The secretariat is submitting to the PPRC the summary and, pursuant to decision B.17/15, the final technical review of the project, both prepared by the secretariat, along with the final submission of the proposal in the following section. In accordance with decision B.25.15, the proposal is submitted with changes between the initial submission and the revised version highlighted.

# **Project Summary**

<u>Indonesia</u> – The adaptation measures to support sustainable livelihoods for local communities in mangrove ecosystem in the Mahakam Delta, East Kalimantan

Implementing Entity: Kemitraan

Project/Programme Execution Cost: 48,887 USD Total Project/Programme Cost: 506,763 USD

Implementing Fee: 43,074 USD Financing Requested: 598,724USD

#### **Project Background and Context**

Mangroves in the Mahakam delta have suffered significant degradation due to conversion into fish pond and other economic activities both in the delta (oil and gas) and the watershed (mining). This significantly reduced the ecological function of the mangrove and its ability to fight climate Change. The main observed climate impacts in the region are sea level rise, sea water intrusion, sedimentation, erosion and the decrease in fish productivity.

The objective of the proposed project is to provide technical assistance as well as building the capacity of local communities to adapt to climate change impacts in the mangrove ecosystem of Mahakam Delta. The project focuses on 3 major components:

<u>Component 1:</u> Restoration of mangrove ecosystems from the impacts of climate change as sources to support economics development (USD 261,332.40)

This component seeks to raise awareness among the community on the importance of mangrove ecosystems and restore 120 Ha of degraded mangrove forest via reforestation by local communitas in 3 villages in the Mahakam Delta.

<u>Component 2:</u> Strengthening the institutionalization of policy and sustainability of mangrove ecosystem conservation (USD 62,147.10)

This component seeks to support the institutionalization of local policies related to the sustainability of mangrove ecosystems by drafting and facilitating the adoption of village regulations and legal protection of the mangrove. This will be facilitated in the three target villages in the Mahakam Delta region.

<u>Component 3:</u> Promoting an alternative economics development for local community (USD 183,283.50)

This component will aim to develop a demonstration plot of silvofishery pond model as a contribution to recover land carrying capacity and increase water quality. This model will plant mangrove in ponds and use proper aquaculture practices and organic production facilities, with the aim to provide sustainable economic value. In addition, this component will support local communities increase their income by adding value to non-timber mangrove products and promote alternative economic resources compatible with adaptation and resilience to climate change.



# ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular-sized Project Concept

Country/Region: Indonesia/Asia Pacific

Project Title: The adaptation measures to support sustainable livelihoods for local communities in mangrove ecosystem in the

Mahakam Delta, East Kalimantan

Thematic Focal Area: Food Security
Implementing Entity: Kemitraan
AF Project ID: IDN/NIE/Food/2017/2

IE Project ID: Requested Financing from Adaptation Fund (US Dollars): **599,351** 

Reviewer and contact person: Imen Meliane Co-reviewer(s): Saliha Dobardzic

IE Contact Person:

Review Criteria	Questions	Comments	Comments on September 10 <sup>th</sup> 2018
	Is the country party to the Kyoto Protocol?	Yes	
Country Eligibility	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	Yes	
Project Eligibility	Has the designated     government authority for     the Adaptation Fund     endorsed the     project/programme?	Yes	
Project Eligibility	Does the project /     programme support     concrete adaptation     actions to assist the     country in addressing	Requires clarification. The project supports measures that help increase resilience and adaptive capacity to climate change impacts. However the project	<b>CR1.</b> Partially addressed in additions on page 9. The information provided on abrasion rates does not provide clarity on whether "the reduction of most of the greenbelt functions" is directly related to climate change.

adaptive capacity to the adverse effects of climate change and build in climate resilience?

does not provide sufficient information to justify the climate risks to the project areas. The impacts highlighted such as sedimentation, erosion and even sea water intrusion can be the direct result of the mangrove degradation because of human activities in the area, in particular aquaculture ponds, upstream logging and mining. There is no detailed information on the climate change risks and impacts in the area, and without it the project is more a project for NRM or livelihood rather than an adaptation project.

**CR 1:** Please provide detailed information on the impacts of climate change as well as future scenarios, in the project area.

**CR 2:** Please justify the choice of the the villages/areas where you are proposing to undertake restoration and other adaptation activities.

CR 3: Please provide more information on how the proposed activities will reduce the climate risks, and further information and justification of the design of these activities and in particular the mangrove restoration. (e.g. why restoring 100 Ha? What are the expected benefits for sediment trapping, reducing erosion etc? After how many years would these benefits be produced? Details on the biophysical conditions and if they are suitable for restoration species to be replanted, density...)

**CR 4:** Please provide more information on the vulnerability of the communities, the beneficiaries of the project and how the results

Please clarify the direct implication of climate change impacts, or its aggravating effects, on the mangrove and the coastal erosion, and provide references.

CR2. Not addressed. The proponents list the villages but does not provide justification of their choice.

Please clarify why you have chosen these villages and not others?

CR3. Partially addressed through additions in page 10. However, the details are not sufficient to clarify the scope of the proposed measures. Given the enormous work done on mangrove restoration, particularly in Indonesia, the project should be able to integrate more lessons learned and provide a better technical description of the restoration plan.

Please provide more details on the proposed activities and their design. Why you have chosen that particular density for restoration? What is the expected survival rate given the site conditions? What is the expected increased sediment trapping by the mangroves after 5, 10 years in future climate scenarios...

CR4. Partially addressed through additions in pages 11 and 17. No additional details provided on the vulnerability of the communities, only a general statement that the communities are vulnerable. Also no further details provided on estimating how much the vulnerability will be reduced with the project activities.

	of the project will help reduce their vulnerability to climate change.	Please provide concrete information (not general) to describe the elements of vulnerability of the community (e.g. level of incomes per household, poverty rates, current level of food security, etc), and exactly how you see the activities of the project contribute to reducing the vulnerability and by how much. Please provide quantitative estimations when possible, based on other similar experiences.
3. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	The information provided is insufficient. The concept proposal does not provide information on concrete economic and social benefits in particular, or on their equitable distribution to vulnerable communities, households, and individuals.  The proposal does not indicate major vulnerable groups or indigenous groups in the area, it only refers to vulnerable communities in general.  CR 5: Please clarify if there are particularly vulnerable groups, minority or indigenous groups in the target areas and what benefits would the project provide in particular to these groups.  CR 6: Please include information in more detail on the expected social and economic benefits (e.g. expected income increase per household,) from the project activities as well as their equitable distribution.  CR 7: Please clarify if there are issues around user and access rights to the mangrove area, fish ponds and other natural products	CR5. Addressed.  CR6. Partially addressed through additions on page 17. It's unclear how the income increased has been calculated, or if these are estimated from similar experiences there are estimations of production increase per Ha, but no estimation of number of beneficiaries in villages. Unclear of the household increase will be only for direct beneficiaries  Please provide further details on how you came to these estimations, and provide details on number of direct and indirect beneficiaries.  CR7. Not addressed.  Please clarify how the communities will access rights to manage the natural resources of the mangrove (is it through YML? Or did YML negotiate access rights to the communities?) and how will the access rights be distributed amongst the beneficiaries?

 4. Is the project / programme cost effective?	It is unclear if the project is cost-effective. In addition, the concept proposal does not provide information on sustainability and how	
enective?	the project results will be sustained after project completion.	
	CR 8: Please provide clarification how the selected measures are effective in addressing climate related risks and vulnerabilities.	CR8. Not addressed. CR9. Not addressed. If YML has been
	CR 9: Many mangrove restoration attempts	restoring mangrove in the area for the past 5 years, then please provide more technical
	have been ineffective, with planted seedlings suffering high mortality rates due to bad choice of species, or inadequate physical conditions and sediment supply. Please provide further	information on the restoration design, in particular managing the sediment supply rates. And describe previous success rates of YML (seedlings survival rates, etc)
	details on the feasibility and potential success rate of mangrove restoration in the area (and previous success rate of YML in restoring mangroves) and how to balance sediment	
	provision for improved restoration results as the area has excess sediment accretion which most likely can cause die-off if mangroves are smothered.	
	CR 10: Please provide other information on	CR10. Not addressed.
	how the chosen adaptation options in the 3 components compare to other adaptation measures that can be considered in the area.	
	CR 11: Please provide further information on how the project results will be maintained in the future after the project has ended (e.g. maintenance of mangrove monitoring, costs of implementation and surveillance of the mangrove policy, funding for scaling up the	CR11. Not addressed. How will YML continue the monitoring activities after the project ends? Please provide more information on the silvo-fishery revolving funds
	silvo-fishery activities)	

5.	programme consistent with national or sub- national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?	In principle yes. The proposed project components seem in line with a number of national and subnational strategies and development plans. More details may be needed at the stage of full project developmen to ensure consistency of the detailed activities with the national policies.	
6.	b. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund??	Requires further information. The proposal highlights some regulations with which the project is in line. However, some of the proposed activities may have to comply with additional national technical standards or regulations such as Environmental Impact Assessments (EIAs), labor laws, and aquaculture and public health regulations (for silvo-fishery, and non-timber food products). It's unclear if some of the activities (mangrove restoration, silvo-fishery ponds) may require permitting.  CR 12: Please identify additional national technical standards and regulations, and state compliance in a logical manner, if there's a need for permitting and who would be the clearing authority.  CR 13: Please demonstrate compliance with	CR12. Partially Addressed through information provided on page 25 and 26. It is still unclear if some activities will require permitting and who will be the clearing authority.  CR13. Not addressed.

7 In there duplication of	more clearly, (e.g. labour rights, pollution prevention, public health, etc)	
7. Is there duplication of project / programme with other funding sources?	Unclear. The concept mentions that there's no duplication of funding for implementing the project but does not highlight other projects that may seek to achieve the same objectives or that may be able to complement this proposal. There are numerous efforts for mangrove restoration and rehabilitation in Indonesia including with an aim for improving restoration design to maximise adaptation benefits. Other relevant and potentially overlapping projects may exist and need to be identified, in particular to draw on the lessons from previous initiatives.  CR 14: Please identify all relevant and potentially overlapping projects/programmes and provide more details the linkages and	CR 14. addressed through additions in pages 27 and 28.  CR15. Not addressed. Given the numerous other initiatives on mangrove restoration in Indonesia, and the little information provided on the restoration design in this
	synergies with other projects if any.  CR 15: Provide information and lessons from the Mangrove rehabilitation program and clarify how they will inform the design of this proposed project.	project, please elaborate further on complementarity and learning from other relevant mangrove restoration-focused initiatives, provide more clarity as to how this project will build upon the lessons learned already.
8. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	The project proposal does not have a specific component on knowledge management but has some activities that contribute to knowledge sharing. This aspect needs further development, particularly at the project development stage.	

	CR 16: Please provide more information on how you will systematically capture and synthesize lessons learned from the project interventions.	CR 16. Not addressed. It's still unclear how the lessons learned will be captured and disseminated.
Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	It is unclear if a stakeholder consultation has taken place or if it is planned for the project preparation phase, as the text mixes past and future tenses.  CR 17: Please clarify if you have carried out already a consultative process with key stakeholders, describing the consultation process and their potential roles in the project.	CR 17. Addressed as per information provided on page 30.
Is the requested financing justified on the basis of full cost of adaptation reasoning?	No. It is unclear that these measures respond to a climate risk. See previous CR 1, 2 and 3.  CR 18: Please address previous CRs on this point and provide additional information to demonstrate how the interventions will address climate change related risks and increase the resilience of both the communities themselves and the Mahakam Delta as an ecological system, in the face of future climate change impacts and scenarios.	CR 18. Not addressed, as previous CRs were not addressed satisfactorily.
. Is the project / program aligned with AF's results framework?	No.  CR 19: Please address previous CR 1-3 and 18 above.	CR 19. Not addressed, as above.

12. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	Unclear. The proposal does not provide sufficient details as to how the project activities will be sustained, replicated and scaled up after the project completion. There's an assumption that by raising awareness, training communities and integrating certain principles in policy, replication and scaling up will happen. Need further development of specific mechanisms to ensure sustainability of the project results.	
	CR20: Please provide more details on the arrangements through which project activities will be replicated and scaled up and what mechanisms will be formulated by the project and how these eventually will be supported by other means. (e.g. how will the village policies be implemented and replicated in other villages, how will the monitoring activities continue once the project funds have ended, etc.)	CR 20. Addressed as per information provided on pages 33 and 34.
13. Does the project / programme provide an overview of environmental and social impacts / risks identified, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	Incomplete and requires further clarification. The risk identification has been made to some degree but several risks may not have been considered or assessed properly. The related information is very general in nature and does not provide enough detail that permits assessing the level of risk – estimated C level. The information in Table 7, under the column potential impacts and risks are often statement of objectives to minimise risks. Several of the principles that were deemed "not applicable" can be areas of risk: e.g. public health, the project will produce food related products and these may need to comply with certain hygiene	

		and health standards to minimise public health risks.  During project preparation, all activities should be fully identified and risks fully identified and managed as required.  CR 21: Please provide a more robust assessment and overview of potential risks of the project, such as land tenure, access rights to coastal resources, gender considerations, ecosystem services, use of potential pollutants (polybag, plastic packaging) etc. When a risk is deemed not applicable, please provide a brief justification as to why.	CR 21. Addressed as per information provided on pages 34-38.
Resource Availability	Is the requested project /     programme funding within     the cap of the country?	Yes	
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	No. it is at 8.62%  CAR1: Please adjust the management fee to be at or below 8.5% of the total project budget before the fee.	CAR1. Addressed.
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	Yes.	
Eligibility of IE	4. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes.	

	1. Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund?	n/a at concept stage	
	Are there measures for financial and project/programme risk management?	n/a at concept stage	
Implementation	3. Are there measures in place for the management of for environmental and social risks, in line with the Environmental and Social Policy and Gender Policy of the Fund?	n/a at concept stage	
Arrangements	4. Is a budget on the Implementing Entity Management Fee use included?	n/a at concept stage	
	5. Is an explanation and a breakdown of the execution costs included?	n/a at concept stage	
	6. Is a detailed budget including budget notes included?	n/a at concept stage	
	7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators, in compliance with the	n/a at concept stage	

Gender Policy of the Fund?	
8. Does the M&E Framework include a break-down of how implementing entity IE fees will be utilized in the supervision of the M&E function?	n/a at concept stage
9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	n/a at concept stage
10. Is a disbursement schedule with time-bound milestones included?	n/a at concept stage
	Fund?  8. Does the M&E Framework include a break-down of how implementing entity IE fees will be utilized in the supervision of the M&E function?  9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?  10. Is a disbursement schedule with time-bound

# Technical Summary

The proposed project concept "The adaptation measures to support sustainable livelihoods for local communities in mangrove ecosystem in the Mahakam Delta, East Kalimantan" aims to provide technical assistance as well as building the capacity of local communities to adapt to climate change impacts in the mangrove ecosystem of Mahakam Delta. The project focuses on 3 major components:

- 1. Restoration of mangrove ecosystems from the impacts of climate change as sources to support economics development;
- 2. Strengthening the institutionalization of policy and sustainability of mangrove ecosystem conservation;
- 3. Promoting an alternative economics development for local community.

The initial technical review found that the proposal did not meet the requirements of the Adaptation Fund primarily because a lack of justification of the climate threats, given that mangrove degradation in the area are largely due to other human activities. The concept does not provide enough details on the adaptation potential of the proposed interventions and activities in face of

future climate scenarios. The linkages between the ecosystem-services of the mangroves and the resilience of the communities are not demonstrated and need stronger articulation.

The review also observed that there are issues that need to be addressed with regards to cost-effectiveness, sustainability and risk assessment.

The final review finds that the concept document has not addressed most of the requests and not provided sufficient information at this stage.

The following observations are made, to be addressed when resubmitting the concept:

a) The proposal should further clarify the direct climate change impacts on the project area, or its aggravating effects, on the mangrove ecosystem and coastal erosion and on the vulnerability of the communities;

b) the proposal should provide more details and justification on the proposed activities, their design and cost-effectiveness;
c) the proposal should demonstrate the adaptation benefits of the project's expected outcomes, providing more detail and clarity on those expected outcomes.



# REQUEST FOR PROJECT/PROGRAMME FUNDING FROM THE ADAPTATION FUND

The annexed form should be completed and transmitted to the Adaptation Fund Board Secretariat by email or fax.

Please type in the responses using the template provided. The instructions attached to the form provide guidance to filling out the template.

Please note that a project/programme must be fully prepared (i.e., fully appraised for feasibility) when the request is submitted. The final project/programme document resulting from the appraisal process should be attached to this request for funding.

Complete documentation should be sent to:

The Adaptation Fund Board Secretariat 1818 H Street NW MSN P4-400 Washington, D.C., 20433 U.S.A

Fax: +1 (202) 522-3240/5

Email: afbsec@adaptation-fund.org



#### 1. Planning

- To identify the cause of the damage, by doing collecting data and analyze it;
- To Identify the extent of damage through water quality data collection, the area damaged areas, the rate of damage, extensive land cover, vegetation and species diversity;
- Preparation of rehabilitation plans by identifying the status; conformity with the coastal zone and small islands, socio-economic conditions; objectives, outputs and benefits; rehabilitation techniques; duration of implementation; type and volume of activities; implementing and responsible for rehabilitation; financing.
- 2. The implementation, done in away:
  - Enrichment of biological resources, namely: planting, restocking and production of artificial habitat:
  - Habitat improvement, namely: the application of appropriate building construction ecological principles, the use / technical application of habitat improvement
- 3. Protection of species to grow and develop naturally
  - The provision and protection of spawning areas (spawning ground), enlargement area (nursery grounds), as well as the area foraging (feeding grounds);
  - · Counseling and awareness
  - Supervision

#### Regulation of The Minister of Marine and Fisheries No.16 of 2008

Regarding the principle of planning management of coastal areas and small islands, Chapter I of Article 3, namely: a. Is an integral and inseparable part of the system of the regional development planning; b. Integrating activities between governments, inter-sector, the business community, between terrestrial ecosystems with marine ecosystems, and between science and the management principles; c. conducted in accordance with the Bio geophysical conditions and potential areas owned by each region, as well as the dynamics of regional and national socio-cultural developments. involved the participation of the local communities and other stakeholders. This is in line with the concept developed in this proposal to implement the restoration activities and vulnerable community's alternative livelihood development in the Mahakam Delta.

# Regilation of The Minister of Home Affairs No. 61 of 2010

Regarding the establishment of guidelines for the organization of the working procedures of the protected forest management unit and the unit of production forest management in the region, and what is meant in this regulation are:

- 1. Forest Management is an activity that includes forest management and forest management plans, forest use, forest area use, forest rehabilitation and reclamation and forest protection and nature conservation.
- 2. Forest utilization is an activity to utilize forest areas, utilize environmental services, utilize timber and non-timber forest products and collect wood and non-timber forest products optimally and fairly for the welfare of the community while maintaining their sustainability.
- 3. Production Forest Management Unit Organization, hereinafter referred to as KPHP, is a production forest management organization whose territory consists mostly of production forest areas, managed by the Regional Government.
- 4. Forest management is the design activity of a forest management unit, including the activities of grouping forest resources according to the type of ecosystem and the potential contained therein with the aim of obtaining maximum benefits for the community in a sustainable manner.

5. Forest and land rehabilitation is an effort to restore, maintain and improve forest and land functions so that the carrying capacity, productivity and role in supporting the life support system are maintained.

#### Regulation of The Minister of Environment and Forestry No.P.33 of 2016

The guidelines for the preparation of climate change adaptation measures, Article 4 paragraph (e) on measures to integrate climate change adaptation measures, development plans and programs. This serves as a basic guideline for carrying out the activities contained in component 2, namely to strengthen the institutionalization (internalization) of policy and sustainability of mangrove ecosystem rehabilitation in the Mahakam Delta region, this will be strengthened by advocacy / local and the provincial government policies. regulations. In the future, the policy will be the legal protective in the preparation of development program plans at the village, district and provincial levels. With this effort it will encourage synergy between all parties, both government, non-government, private actors and the community in maintaining the ecosystem of the Mahakam Delta region.

# Regulation of The Minister of Environment No.19 of 2012

About climate village, Appendix 1 point (C) which contains about approach, principle and strategy. The program contained in component 3, is to build the resilience of vulnerable communities to be able to adapt to climate change that occurred in the delta area through the implementation of promotional activities and economics, development of alternative local communities proportionally based on the principles of environmental sustainability, in addition, in line with the guidelines in this ministerial regulation, the program will be implemented in the community, to create sustainable management principles and implementation of strategies in achieving the targets of activities, such as establishing partnerships with relevant institutions, local government, businesses institutions and non-government institutions; and encourage leadership at the community level to maintain the sustainability of climate change adaptation and mitigation activities in the Mahakam Delta.

# Republic of Indonesia Law No. 23 of 1997 Concerning Environmental Management Article 1:

- 1. The environment is a unity of space with all objects, power, circumstances, and living things, including human beings and their behavior, which affect the survival of the lives and welfare of humans and other living things;
- 2. Environmental management is an integrated effort to preserve the environmental function which includes policies for structuring, utilizing, developing, maintaining, restoring, controlling, and controlling the environment;
- 3. Sustainable development that is environmentally sound is a conscious and planned effort, which integrates the environment, including resources, into the development process to ensure the ability, welfare and quality of life of present and future generations;
- 4. Ecosystems are the elements of the environment which are whole unity and influence each other in forming environmental balance, stability and productivity;
- 5. Preservation of environmental functions is a series of efforts to maintain the continuity of the carrying capacity and capacity of the environment;
- 6. The carrying capacity of the environment is the ability of the environment to support the lives of humans and other living beings;
- 7. Preservation of environmental carrying capacity is a series of efforts to protect the ability of the environment against the pressure of change and / or negative impacts caused by an activity, so that it is still able to support the lives of humans and other living beings;

- 8. Environmental capacity is the ability of the environment to absorb substances, energy, and / or other components that enter or are included in it;
- 9. Preservation of environmental capacity is a series of efforts to protect the ability of the environment to absorb substances, energy, and / or other components that are discharged into it;
- 10. Resources are elements of the environment that consists of human resources, natural resources, both biological and non-biological, and artificial resources.

#### Article 5:

- 1. Every person has the same rights to a good and healthy environment;
- 2. Every person has the right to environmental information related to the role in environmental management;
- 3. Every person has the right to play a role in the framework of environmental management in accordance with the applicable laws and regulations.
- **A.** Describe if there is duplication of project / programme with other funding sources, if any.

Propose this project, no others funding sources accessed in implementing programme. The current conditions, there is no duplication of activities / programs with financial support from the other parties, but the future implementer (YML) will establish cooperation and synergy with various stakeholders in the Mahakam Delta region such as Dipterocarfa Research, KPH, companies, DDPI, GGC, GGGI and the Provincial Government of East Kalimantan to improve the success of the program, to avoid overlapping of programs and shared responsibility (role) in maintaining sustainability the environment and reduce of climate change impact in the Mahakam delta region.

All proposed activities are based on the relevance of real conditions in this region, there are several activities that are also carried out by other actors in various regions. However, this can be used as a program synergy, related to technical implementation and learning outcomes (see in table 6.c).

Table 6.c. identification of program relevance

Activity	overlapping	Remarks
Component 1		
Socialization of coastal and mangrove     Ecosystem	Not	Implemented also by other actors in different locations
Training of seeds collection, nursery and mangrove planting	Not	not carried out by other actors
3. Training of reforestation strategic	Not	not carried out by other actors
Environment campaign in the schools (elementary and junior high school students);	Not	not carried out by other actors
5. Mangrove reforestation activities	Not	Implemented also by other actors in different locations
6. Survey of seeds stocks by internal team	Not	not carried out by other actors
7. Growth Monitoring	Not	not carried out by other actors

8. Carbon Stock Establishment	Not	Implemented also by other actors in different locations
Assessing impacts and vulnerability in Mahakam Delta	Not	not carried out by other actors
10. Guidebook writing and duplcation	Not	not carried out by other actors
Writing the policy brief documents and publication	Not	not carried out by other actors
Component 2		
1. FGDs in villages	Not	Implemented also by other actors in different locations
2. FGD in district	Not	not carried out by other actors
3. FGDs in province for police brief Recommendation	Not	not carried out by other actors
4. Monitoring and evaluation program	Not	not carried out by other actors
5. Workshop in province	Not	not carried out by other actors
Component 3		
1. Socialization	Not	Implemented also by other actors in different locations
2. Training of silvofishery pond	Not	not carried out by other actors
3. Demplots silvofishery and mentoring	Not	Implemented also by other actors in different locations
4. Training of non-timber mangrove product	Not	not carried out by other actors
5. Procurement of non-timber mangrove products processing equipment and mentoring	Not	not carried out by other actors

The proposed project is described, that the mangrove ecosystem in the Mahakam Delta has a very important function in biotic and abiotic that can be used as learning in the management of a coastal area.

- Biotically the mangrove ecosystem has strongly linked with the Mahakam watershed system and the ecological mangrove ability to minimize / reduce the contamination- in the watershed system; In addition to the water filtration function of roots system, in this biotic ecosystem also serves as a nursery ground (the breeding) for organisms in coastal and other functions.
- Abiotically mangrove has a very vital function, other than as the retention rate of coastal abrasion, mangrove ecosystem is also a protection area and other organisms as well as the livelihoods of local communities from the impact of to storms and sea waves to the mainland. Another impact is the ability to reduce the rate of sea water intrusion into the mainland.
- Experience in the implementation of mangrove rehabilitation that has been carried
  out, will make learning important, how a reforestation program is designed based
  on the topology of the area to be reforestated, which is based on environmental,
  social and economic aspects that are integrated in reforestation strategy.

Mangroves can also provide other economic alternative through the processing of mangrove product non-timber as part of the alternative food security for coastal communities.

The importance of mangrove sustainability, as described above, restoration of mangrove very important to the sustainability of local communities' livelihoods.

**B.** If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

Given the importance of sustainability of the mangrove ecosystem in the Mahakam delta as described in section F, then one of important component in sustainability is "The Learning and Knowledge Management". It is said to be important because if the stakeholders do not have the same understanding and vision in the mangrove ecosystem management, the program goals and sustainability of environmental are difficult to achieve. In addition, in the learning and knowledge management is also needed a right dissemination strategy.

The management of knowledge and learning that will be done during the program are:

- 1. Every 6 months, the program will prepared a "Partner Review Progress" report to be distributed to related parties such as village government, local government and donors;
- 2. Learning outcomes and knowledge gained during 1 year of program implementation will be presented in the form of leaflet (self financing YML) which will be distributed to related parties as media of environmental awareness campaign.
- 3. During the duration of the program will be socialization, FGD and a series of capacity building and workshops involving local community program beneficiaries, the village government, district government, provincial government, universities, the company (Pertamina Hulu Mahakam/PHM), Climate Change Council and parties others who have signed the "Green Agreement" in East Kalimantan. In each of these activities YML will distribute the experience and learning of the program as a means of learning and sharing campaigns related to environmental monitoring management and adaptation to climate change;
- 4. Learning publications will also be conducted through documentary films, planning manuals and mangrove restoration strategies, silfoveshery techniques guides, non-timber mangrove product development guides, and a guide to the calculation of permanent carbon sample plots. The Media generated in the program will also be disseminated to all parties which in related with environmental preservation Mahakam delta region;
- 5. The Utilizing forums or meetings both at village, district and provincial and working with other parties such as GGGI, DDPI, GGC and meetings facilitated by the local government to disseminate the knowledge and learning program, which has been carried out since 2016 to date;
- 6. In collaboration with experts and campus research teams who are members the Institute of community services, Mulawarman University (LPM UNMUL) in several activities, with the involvement of the campus is expected they can also participate disseminate knowledge, learning and success of the program at the campus level, YML has collaborated in several community empowerment activities and research activities in the Mahakam Delta since 2013 to date;
- 7. The knowledge management process at the program development stage has been carried out by building networks of parties, informal or formal meetings through FGDs, workshops, etc. in addition to YML's institutional technical capabilities.
  - The program also involves technical institutions in their fields and some forms of learning can also be distributed in the form of leaflets, brochures, guidebooks and films.
  - **C.** Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups,

including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund.

To support the achievement of the program's success, the process of consultation be an important component to do. Strategy consultation will be carried out at all stages of the program cycle starting from the stages of preparation, implementation, monitoring and evaluation will be done in stages both at village, district and provincial levels. The consultation process will be to consider the interest and involvement of women and vulnerable groups, who had been the recipient of the leading group of climate change impacts.

The consultation process before program implementation has been carried out with several key stakeholders. At the Village Level a joint consultation was held with Muara Pantuan Village Chief, Sepatin Village Head, 1 women's group, 1 group of fish farmers, several local community leaders in the Mahakam Delta. At the district level together with Marine and Fisheries Department (DKP) and Regional development and planning agency (BAPPEDA), while at the provincial level consultations with Environment Department (DLH), Forest Management Unit (KPH) Delta Mahakam and Sub-National Board of Climate Change (DDPI) were conducted.

The consultation process will take place at every stage of the program and level are as follows:

#### Village level

The consultations this level, carried out since the program preparation phase, implementation, monitoring and evaluation. On the stages of preparation of the parties involved is a village government, community leaders, the district and the local communities especially vulnerable groups and women who live their lives depend on the Mahakam delta. The activities that will be performed on the stages of preparation are: mapping of target groups (gender roles), mapping the locations of restoration, mapping local facilitators, preparation of territorial baseline (social, economic and environmental) and consulting program framework. At each of these activities will be ensured the involvement of women and vulnerable groups in the assisted villages, the stage of implementation at the village level will also be carried out analysis of the value chain, at the stage results of the monitoring and evaluation to be carried consulted with stakeholders such as village government, and the target group, in order to be learning together in improving the achievement of the success program's.

#### **District level**

The Consultations were carried out in the stage of preparation of the parties involved such as: "Bappeda", DLH, DKP (extension), Research and Development area, the Department of Land and arrangement of space. The involvement of all stakeholders was also conducted on the process of FGD districts to expand the parties that will be involved as the private sector, other programs / NGO, Department of Tourism, Department of Industry, Trade and cooperatives as well as representatives of vulnerable groups of 3 assisted villages.

#### **Provincial level**

The consultation process started in the preparation stages, workshops, up to monitoring and evaluation involving relevant stakeholders like KPH, DDPI, GGGI, DKP Province, DLH, and Community Development Institute UNMUL. the consultation process can also take advantage of the meetings held by the local government and other programs that have an interest in the Mahakam delta. this process of consulting the provincial level will also promote the interests of women and vulnerable groups and involve representatives of vulnerable groups who are in the Mahakam Delta.

**D.** Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

To strengthen the resilience of communities in Delta Mahakam as an ecological system of the intervention program through three main components namely restoration, institutionalization of policies and promotion of alternative livelihood would be helpful to realize climate change adaptation action plans in the Mahakam Delta ecosystem. Related detailed explanation of these interventions can be seen in the following matrix:

Component 1. Restoration of mangrove ecosystems from the impacts of climate change as a sources to support development economics			
ОС	Baseline	Additional (with AF)	
1.1.	Poor understanding of the local community about the benefits of mangrove ecosystems for their livelihood sustainability	To conducting awareness and socialization activities on the mangrove ecosystems function for life, implemented in schools in the Mahakam Delta, local communities and village government.	
1.2.	Degradation of mangrove ecosystem in the Mahakam Delta caused by climatic and non-climatic factors, has resulted in a decline in mangrove resources services, social services and economic services in the region	<ul> <li>The rehabilitation activities in the Mahakam Delta region with priority on critical lands and partly in fish farms, to stabilize the sustainability of mangrove ecosystems as a provider of community environmental, social and economic services;</li> <li>Monitoring carbon and the local community will formulate strategies for the rehabilitation.</li> </ul>	
Com	ponents 2: Strengthening the Institutiona mangrove ecosystem conserv	lization of policy and sustainability of vation	
ОС	Baseline	Additional (with AF)	
2.1.	The degradation of the mangrove ecosystem at this time, one of which is the absence of policies at the village level that regulate the management of community livelihoods while maintaining the rules of the conservation of biological resources;	<ul> <li>To conduct FGDs at the village level with local actors, the village government and relevant stakeholders, so that it can a Draft Recommendation for Village Regulation to be result in each target village, and in the future can be replicated to other villages</li> <li>Facilitated the establishment of environmental groups for climate change adaptation that play an important role in safeguarding the implementation of "perdes" and pioneer of environmental sustainability.</li> </ul>	
	The Synergistic of very low area management of the government and non-governmental actors in implemented of regional recovery activities;	<ul> <li>To conduct campaigns and policy advocacy through coordination meetings / consultation, Focus Group Discussions, workshops, and attend meetings that have been facilitated by other stakeholders at both the district and provincial levels;</li> <li>Facilitate of a "policy brief" as the Policy Recommendation document to build the synergy of each actor in carrying out activities within the Mahakam Delta region.</li> </ul>	
Com	Components 3: Promoting and to develop an alternative for development economics local community		
ОС	Baseline	Additional (with AF)	

3.1.	The vulnerability livelihoods of local communities which led to a decrease in family income;	To improving the community aquaculture system through silvofishery demplot in 3 locations of activities that can restore the carrying capacity of fish ponds so as to increase aquaculture productivity by collaborating between mangrove vegetation and aquaculture in the production cycle, also develop alternative livelihoods of vulnerable communities with non-timber mangrove product in 3 locations activities;
3.2.	The low level of community knowledge related to sustainable livelihood management	<ul> <li>To training vulnerable community in the managing sustainable livelihoods while supporting the conservation biological resources of the mangrove forests;</li> <li>Mentoring of scheduled to involve the local community who have been trained;</li> <li>To Facilitated instructional media through the provision of 4 guidebooks on silvofishery, non-timber mangrove products, reforestation strategies and Plot Sample Permanent carbon accounting for dissemination to the community and other related actors.</li> </ul>

The three components of the program are in accordance with the AF results framework

**E.** Describe how the sustainability of the project/programme outcomes has been taken into account when designing the project / programme.

#### 1. Replication village policies

The Replication policies between villages. To ensure the sustainability of mangrove ecosystems in the delta region requires awareness of all stakeholders to be actively involved in maintaining the region. Although during the program YML only encouraged the birth of a draft regulation villages in three villages assisted but given the importance of maintaining continuity so that the middle of the year the need to raise awareness and replication to the village government and other villages who are geographically located area of the delta to get together to have a policy of village related to the conservation of the mangrove areas while considering the interests of vulnerable groups.

#### 2. Establishment of Environmental Observer Groups

In the process of program assistance, will be facilitated the establishment of environmental groups. The group is expected to be a pioneer in maintaining environmental sustainability and climate change adaptation at the village level. In addition, this group will also oversee the village regulations that have been prepared through the process of program assistance. The environmental members group are derived from the elements: village government, community leaders, marginal groups who have been relying their livelihoods on coastal areas by taking into account the proportion of women and men.

The existence of this group is also expected to be a partner of the village government, especially in maintaining the sustainability of mangroves and adaptation to climate change.

### 3. Policy Advocacy at the provincial / district

Level policy advocacy encourage districts / provinces. In the design of this program in the second year will facilitate their "breaf Policy" Sustainability related Mangrove Zone and the impact of climate change in the Mahakam Delta. Documents are expected to encourage

the birth of regional policies to maintain the sustainability of mangrove areas, other than that through a process of consultations, meetings or workshops at the district level and provincial These efforts will continue to be advocated as part of a "scaling up" of the broader program learning success. This is certainly in line also with the "Green Deal" that has been agreed by all parties in East Kalimantan.

In addition to policy advocacy, through a process of consultation and coordination that is routinely carried out by local authorities in this case DLH, KPH, DKP and BAPPEDA future will be driven also advocates budgeting on the institution-related, in order to enter the planning ("*RKA*") and Budget programme Local Government Agency (OPD) activities which contributes to the conservation of the delta region by taking the learning success of the programs supported by this fund adaptation.

#### 4. The Sustainable Promoting and to develop an alternative economics

Silvofishery model development is done in the design of this program certainly will synergize the ecological function of mangroves to aquaculture practices, in which there are the planting and maintenance. With the learning expectations will be replicated by the farmer in the Mahakam Delta region and gradually to give a positive impact for the conservation of mangrove areas and reduce the impact of climate change.

Meanwhile, through the development of mangrove non-wood products, have also agreed jointly target groups to put aside their income every year from the remaining results of business by 1% until 2%, which would be contributed to the conservation of the environment, including the mangrove areas.

#### 5. Mentoring and independent monitoring

As a form of moral responsibility to sustain the success obtained during the program, program implementer will conduct post-program monitoring. These activities will be regularly do of per 3 months with the involvement of local communities and officials. The involvement of local facilitators from the community is also a strategy to ensure the mentoring process is still running at the community level. Through this strategy is expected to maintain the success of the restoration has been done.

To ensure the sustainability of the program that can be replicated and scaled up after the end of the project, YML has developed M & E for a duration of 2 years. In addition YML with full support from DDPI has worked in building a green development agreement with the parties from 2017 to 2018 in Delta Mahakam which involves multi stakeholders from government, companies, NGOs and community leaders, which is the commitment of East Kalimantan province in reducing carbon emissions from 1,500 tons of CO2 eq in 2015, to be 1,000 tons of CO2 eq by 2030.

This green development cooperation agreement, can also be used as a tool to replicate other village programs by stakeholders in addition to being a program learning media.

Furthermore, the sustainability process of M & E designed by YML, by optimizing the results of agreements that have been built, will involve directly KPHP institutions, dipterocarfa research, DDPI and the community for 2 years with joint financing within the framework of collaboration and sustainable management of the Delta Mahakam area in adapting to climate change.

**F.** Provide an overview of the environmental and social impacts and risks identified as being relevant to the project / programme.

In terms of environmental impacts, this programme would clearly brings positive benefits for the recovery of ecological function of mangrove ecosystem in Mahakam Delta. Furthermore, it also supports biodiversity conservation by recovering natural habitat for wildlife and climate mitigation action by increasing carbon sequestration capacity in mangrove ecosystem. This programme also gives direct social impacts by providing alternative sustainable livelihoods for local communities and promotes gender equality by involving women in the programme. The risks that may occur is community resistance to the programme. This can be mitigated by seeking approval in the early phase of proposal development and programme preparation.

Checklist of environmental and social Principles		No further assessment required for Compliance	Potential impact and risks – further assessment and management required for compliance
1	Compliance with the Law		
2	Access and Equity		
3	Marginalized and Vulnerable Groups		
4	Human Rights		
5	Gender Equity and Women's Empowerment		
6	Core Labor Rights		
7	Indigenous Peoples		
8	Involuntary Resettlement		
9	Protection of Natural Habitats		
10	Conservation of Biological Diversity		
11	Climate Change		
12	Pollution Prevention and Resource Efficiency		
13	Public Health		
14	Physical and Cultural Heritage		
15	Lands and Soil Conservation		

Table 7. To Explanation about potential impact of environmental and social principles and identification of risk and handling steps can be seen in the following table:

No.	Environmental and social Principles	Potential Impact and Risks	Further assessment procedure and potential prevention and mitigation measures
1.	Compliance with the Law	Not Applicable	-
2.	Access and Equity	Unbalanced access to utilization and access to mangrove conservation in the Mahakam delta will be minimized through component 1 and component 2, such as:     Excessive logging of mangroves for fish FADs, resulting in decreased carrying capacity of mangroves as a provider of coastal environmental services.  2. Management of ponds that are not environmentally friendly and use of fish poisons, have a direct impact	<ul> <li>To Provide access information to stakeholders in the Mahakam delta in the form of advocacy media, as well as activities in providing community capacity building and assistance (component 1);</li> <li>To facilitate of village rules related to the conservation and utilization of mangroves, Through FGD, M &amp; E, and workshop activities (component 2) will open the same access for local communities in the sustainable use of SDA in Delta Mahakam;</li> <li>Opening balanced access to sustainable development of</li> </ul>

3.	Marginal and Vulnerable Group	on reducing the carrying capacity of ponds.      The lack of participation at the level of marginal groups will increase vulnerability and	silvofishery activities and developing alternative livelihoods through sustainable non-timber mangrove products (component 3).  The Persuasive approach and discussion to vulnerable groups in the stages of project preparation;
		poverty due to the effects of climate change.  • The low level of human resources, especially women and other vulnerable groups, will hamper the development of food diversification	<ul> <li>To Assessment of vulnerable and marginalized groups in the delta region, and formulated in local level policies (component 2);</li> <li>To Provide special assistance to the marginalized and vulnerable groups so that they are benefit from the programme being, (component 3).</li> </ul>
4.	Human Right	Not Applicable	(component 3).
5.	Gender Equality and Women Empowerment	The lack of gender equality at every stage of activities that have taken place in the Mahakam Delta  The lack of facilitation of Capacity building and women empowerment with of attention to low Human resources factors in the transformation of the sustainable natural	<ul> <li>To Conduct gender analysis previous to implementation of activities at the project preparation stage.</li> <li>To Provide special the strengthening and assistance to improve women's roles and improve gender equality through the involvement of environmental management training (component</li> </ul>
		The absence of the development of non-timber mangrove products that are productive as alternative livelihoods for women's groups will exclude these women's groups.	<ul> <li>1, output 1.1.1. and 1.1.2.) and than development of alternative livelihood (component 3, output 3.1.2.).</li> <li>To Facilitate mangrove promotion product and awaken partnerships with other parties such as KPH, and Tourism Department, to through FGDs and workshops at village, district and provincial level (Component 2, output 2.1.1.);</li> <li>To Strengthening technical assistance for mangrove products of non-timber and mentoring (component 3, output 3.1.2. and 3.2.2.);</li> </ul>
			To monitoring and evaluation program regularly
6.	Core Labor Right	In this project even though the community is not a freelance worker, but they are the beneficiaries who have the responsibility and contribute in the form of inkind, the risk aspects in the implementation of	<ul> <li>safety first prioritized in every activity in the field</li> <li>Ensuring that the community working in this project is at least equipped with health insurance</li> </ul>

		activities must or remain protected.	
7.	Indigenous Peoples	Not Applicable	-
8.	Involuntary Resettlement	Not Applicable	-
9.	Protection of natural habitat	The decline of mangrove resources as a provider of ecological services, will reduce the proliferation of aquatic biota including protected waters such as natural shrimp, "Pesut" (local dolphin), and primate animals such as "Bekantan" (long noses monkey) nasalis larvatus.	<ul> <li>To socialization and awareness activities on The mangrove ecological functions for existence of natural biota;</li> <li>Planting mangroves as many as 600,000 trees, especially in critical areas, to integrate coastal green belts in the Mahakam Delta and 28,800 trees in the fishpond (component 1);</li> <li>To monitoring and evaluation program regularly (component 2, output 2.1.1.);</li> <li>Limited and sustainable utilization on the activities of non-timber mangrove products, does not exceed 30% of the potential of the fruit that is in the delta area (component 3, output 3.2.2.).</li> </ul>
10.	Conservation of Biological Diversity	Not Applicable	-
11.	Climate Change	<ul> <li>Reforestation activities will have a positive impact on the region for the future, as a natural protection for local communities and natural habitats.</li> <li>The less fishermen catch, the activity in component 1 is expected to increase the catch of traditional fishermen which will directly affect their income</li> </ul>	<ul> <li>To socialization and training as well as planting by applying priority scale of planting in critical land in coastal areas. To assist local communities, other vulnerable groups and village government in the planning and implementation of reforestation appropriate strategies each year (component 1, output 1.1.1. and 1.1.2.), including provision of reforestation strategy guidebooks and monitoring periodic of mangrove growth (output 1.2.2.);</li> <li>Monitoring and evaluation with</li> </ul>
			<ul> <li>Monitoring and evaluation with stakeholder relevant to ensure the sustainability of the restoration of mangrove ecosystems as ecological service providers of the area that can have a positive impact in maintaining sustainable livelihoods for fishermen. (component 2, output 2.1.1.);</li> <li>To increasing the capacity of vulnerable groups to alternative and sustainable livelihoods in adaptation to climate change (component 3, output 3.1.1.).</li> </ul>

40	Dellution	Potential mangrove	The application of SOP Nursery,
12.	Pollution Prevention and resources efficiency	resources that have declined, as the provider of ecological services in maintaining the sustainability of local livelihoods.	on standardizing the use of seeds / propagules in accordance with predetermined quality standards, will avoid the use of unsuitable / ineffective seeds; To provides a guide book of reforestation, silvofihery and of mangrove products non-timber (component 1, output 1.2.1.);
			The formulate in village-level policies in the utilization of natural resources that are efficient and effective for the sustainability of mangrove ecosystems in coastal areas (component 2, output 2.1.1.).
		Not using chemical or inorganic production facilities, but using only organic production means, which can to increase the carrying capacity of the land and stimulate the growth of microorganism which is a natural food of shrimp and fish in silvofishery ponds with no pollution impact;	<ul> <li>To strengthening capacity with the socialization, mentoring and training (component 3, output 3.1.1. and 3.2.1.);</li> <li>To build "demonstration plots" of silvofishery and regularly mentoring of technical Aquaculture;</li> </ul>
		The guarantee in the development of sustainable livelihood alternatives by developing sustainable nontimber mangrove products for vulnerable groups in the Mahakam Delta by utilizing mangrove fruits resources (maximum 30% of mangrove fruiting) that are efficient and effective.	<ul> <li>To built and develop to mangrove product non-timber with in limited way utilization of mangrove fruit (maximum 30% of the fruits in the tree), but still effective and sustainable; (4)</li> <li>Monitoring and Evaluation with beneficiaries regularly;</li> </ul>
13.	Public Health	Health insurance from mangrove fruit processed products      Waste polybags from the mangrove nursery	<ul> <li>Maintain sanitation of the products produced and register them in the health department</li> <li>To choose and collect, the condition of a good polybag will be reused and the damaged one is transferred to a waste treatment facility in the subdistrict area, besides that it can also be recycled</li> </ul>
14.	Physical and Cultural Heritage	Not Applicable	-
15.	Lands and Soil Conservation	Not Applicable	-
	(4) The observation by the team in the field, manarove fruit contained in the trees, more than 50% is not		

<sup>(4)</sup> The observation by the team in the field, mangrove fruit contained in the trees, more than 50% is not utilized by the natural habitat or the system of regenerative growth of mangroves, fruit that fell, many were swept away and carried away by the tide.

Table 8. Adherence between the components and results associated with the ESP Adaptation Fund

	Adaptation Fund			
NO.	Component and Outcomes	ESP Adaptation Fund		
1	Restoration of Mangrove ecosystems from the impacts of climate change as a sources to support economics development;			
	Formed communities and local governments awareness in the conservation natural resources.	2 3 5 9 11	Access and Equity Marginalized and Vulnerable Groups Gender Equity and Women's Empowerment Protection of Natural Habitats Climate Change	
	Strengthened awareness and ownership of local communities and groups of students related to conservation of Mangrove ecosystem as an effort to overcome the impact of climate Change.	2 3 5 9 11 12	Access and Equity Marginalized and Vulnerable Groups Gender Equity and Women's Empowerment Protection of Natural Habitats Climate Change Pollution Prevention and Resource Efficiency	
2 Strengthening the institutionalization of policy and sustainability of mangi conservation;		I sustainability of mangrove ecosystem		
	Encouraging the institutional of policy in the conservation mangrove Ecosystems.	2 3 5 9 11 12	Access and Equity Marginalized and Vulnerable Groups Gender Equity and Women's Empowerment Protection of Natural Habitats Climate Change Pollution Prevention and Resource Efficiency	
3	Promoting and to develop of alternative econ	omic	es development for local community.	
	3.1. Enhance the capacity of local communities in the development of alternative economies;	2 3 5 11 12	Access and Equity Marginalized and Vulnerable Groups Gender Equity and Women's Empowerment Climate Change Pollution Prevention and Resource Efficiency	
	3.2: Increased local community income by means the promotion of sustainable alternative economics development	2 3 5 9 12	Access and Equity Marginalized and Vulnerable Groups Gender Equity and Women's Empowerment Protection of Natural Habitats Pollution Prevention and Resource Efficiency	

Generally, the series of components to be implemented in this project certainly does not give a negative impact on climate change, the activities that will be done have the positive potential to improve the environmental and social security system, the including mitigation

measures. The program will be classified into **category C** or it can be said that the program does not have any adverse social and environmental impacts.

# PART III: IMPLEMENTATION ARRANGEMENTS

**A.** Describe the arrangements for project / programme implementation.

The programs will be implemented starting January 2019 until December 2020 with details are as follows:

The arrangements of program implementation is divisible for 4 stages: Preparation, Implementation, Monitoring and Evaluation, and closing project stage / delivery adaptation.

# a. Preparation stage

This a supporting activity in order to prepare the process of program implementation. At this stage YML will be responsible for ensuring all sub activities are implemented. To implement this activity YML will partner with several other parties, namely:

- Village Government: through consultation and assessment processes with the team, the village government will recommend of villages area that will target program areas, other than can provide recommendations in determining prospective communities' groups including considering representation of vulnerable groups and gender equality.
- Forestry Taskforce Unit (KPH), Environmental Department, Forestry Department, Maritime and Fisheries Department this stage of preparation the parties will provide policy-related information about the management of the Mahakam delta area and build future program synergy and collaboration, especially on the principles of environment, social and economics.
- Sub National Board of Climate Change (DDPI): it's an institution of established through the governor regulation no.9 of 2017 to coordinate the implementation of climate change control in East Kalimantan; this preparation process to obtain information on the management of the Mahakam Delta in an integrated manner with the involvement of non-government stakeholders.
- Regional Development Planning Agency as responsible for the planning of the regional program at the district and provincial level through the consultation process is expected to coordinate the existing programs at the district or regional work unit level associated with the Mahakam Delta region.

#### b. Implementation stage

This stage is divisible into 3 components namely restoration of mangrove ecosystems from the impacts of climate change as a sources of support economics development, Strengthening the institutionalization of policy and sustainability of mangrove ecosystem conservation, and Promoting and to develop of alternative economics development for local community. Where to ensure the implementation of activities on each component, YML will be partner with:

- Village Government: To support and ensure the implementation of programs at the village level, provide village facilities that can be utilized for the implementation of activities and awareness of the importance of mangroves and facilitate the preparation of related to the management of mangrove ecosystems at the village level.
- Forestry Taskforce Unit (KPH): To providing information on the ecology of mangrove area it's management in accordance with existing regulation, providing assistance to village government in drafting village regulation. And then YML will be collaborate with

forestry taskforce unit in the development Silfovishery and non-timber mangrove product as a sustainable livelihood.

- Sub National Board of Climate Change (DDPI): support to implementation of program activities such as raised awareness, disseminating learning, policy advocacy and facilitating collaboration and synergy between programs at both local government and non-government.
- Marine and Fisheries of Department, and environment of department: conducting guidance to coastal community groups in the development of businesses that are destructive and non-chemical.
- Dipterocarps research team will be involved in the implementation of component 1 and component 2, which will undertake permanent carbon establishment, assaying impacts and vulnerability in The Mahakam Delta.

### c. Monitoring and evaluation stage

this activity stage is a very important to ensure the program according to the design that has been agreed. In the monitoring and evaluation stage YML will partner with related parties:

- Village government and stakeholders: Routinely conduct CO joint monitoring at the village level on the implementation of activities;
- Dipterocarps research team: with field teams to monitor mangrove growth rates in the sample plots, and estimate carbon uptake from the mangrove planting results;
- Forestry Taskforce Unit KPH: The Monitoring implementation of program activities in order to conform to the existing rules and policies, especially in the management of mangrove areas;
- Maritime and Fisheries of Department (DKP): ensuring silvofishery activities are in line with the utilization of coastal space through integration of aquaculture activities with coastal ecosystems;
- The Environment of Department: monitoring the implementation of program activities with the use of environmentally friendly materials and do not do the area exploitation;
- Regional Development Planning Agency (BAPPEDA): facilitate synergy of results of monitoring and evaluation of projects with other programs that are also in the Mahakam delta area to become a joint learning;
- Sub National Board of Climate Change: Facilitate project monitoring and evaluation in the context of climate change control in East Kalimantan.

#### d. Project Closing/ Delivery adaptation

Delivery Adaptation / project closing stage is the final stage of the program to distribute the learning and ensure the sustainability of success through synergy and collaboration with local government and other programs. In the implementation of this stage YML will build partnerships with related parties such as:

- Village Government: disseminates lessons learned from the program to village government and other village communities located in the Mahakam delta area so as to jointly adopt the successes achieved;
- Forestry Taskforce Unit (KPH): facilitate and adopt project success to become one of the future KPH program strategies;
- Sub National Board of Climate Change (DDPI): Facilitate project learning outcomes for policy advocation materials, program strategies related to climate change control;

- Regional Development Planning Agency: Facilitate the success of project learning to get government program support in the following years, so that what has been a success can continue because of the support and support of the local government;
- Private Sector: Support Capacity Building to local community and stakeholder relevant in The Mahakam Delta especially to rehabilitation of mangrove

The arrangements of program implementation based on the project cycle, responsible for each activity, contribution of fund, the strategic partners involved at each level are described in *annex 01*.

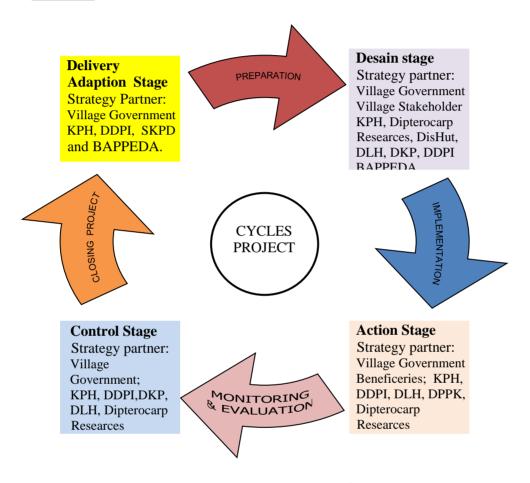


Fig. 10. The Implementation of Project Cycles

**B.** Describe the measures for financial and project / programme risk management.

Create cooperation agreement between the parties with adhere the anti-corruption laws, customize between the things that need to be achieved in a given time period with budget availability, and provide understanding to the community about budget disbursement process. YML will focus on financial risk management by conducting audit and monitoring program

together by using financial accounting tools in the form of institutional financial SOP. Prior to program implementation, YML would develop agreement on budget management internally

KPH: Forest Management Unit; DisHut: Forestry Department; DLH: Environment Department;

DKP: Marine and Fisheries Department; BAPPEDA: Regional development and planning agency;

SKPD: Regional Work Unit; DDPI: Sub-National Board of Climate Change

as well as with communities based on Indonesian corruption law. Furthermore, YML would also deliver information to communities regarding funding, installments, and the use of programme supporting asset.

The success one key of the program is the ability to management of maximize the opportunities and at same time reduce risks / challenges faced in implementing the program to a minimum.

Table 9. Financial and programme risk management

No.	ASPECT	RISK POTENTIAL	RISK HANDLING STRATEGIES
1	Financial	Changes in the exchange rate will affect the budget	Adjustment exchange rate of fluctuations IDR against US \$ at the time of fund transactions in the bank by conducting an exchange rate gap within the activity budget detail of 5-6%; Logical consequences can the reduction funds from donors.
		delays in disbursement of funds	<ul> <li>Timeline revision, through the adjustment of available funds taking into account the priorities of the activity work plan for the period.</li> </ul>
2	Communication network	50% of assisted areas that can't reach communication networks	<ul> <li>The Adjustment of timing arrangement with tidal surface.</li> <li>Community Organizer is from a local person.</li> <li>To Establish communication system in empty area using 2 meter band frequency (VHF) provided by YML.</li> </ul>
3	Community socio-culture	The habit of the community using mangrove wood to make FADs.	<ul> <li>The Community awareness activities of fishermen related ecological functions of mangrove as spawning ground, nursery ground, and natural fish feeding ground.</li> <li>To Direct involvement of fishermen's representatives in activities.</li> <li>To used Persuasive approach.</li> </ul>
		Assistance of social group vulnerability in business development mangrove product of non-timber	<ul> <li>To developing and assisting business diversification in the vulnerable groups.</li> <li>To accompany the newly vulnerable groups intensively, in developing non-timber mangrove business.</li> </ul>
4	Institutional	Differences in perceptions between local stakeholders (LPM, BPD, Village government) on sustainable environment	<ul> <li>To Conducting persuasive dialogue with local actors.</li> <li>To Conducting awareness and understanding to local actors related the importance of sustainable environment</li> </ul>
		Increasing capacity of community groups with low human resources	<ul> <li>To conducting ongoing guidance and assistance to improve self-help groups in running their business</li> <li>The Synergize with local volunteers to improve the group's capacity in the local community</li> </ul>
		Nothingness of standard rules on sustainable natural resource management	To Encourage and assist the Village Government to draft PERDES on sustainable natural resource management

5	Environment	The use of polybag from plastic material	To choose and collect, the condition of a good polybag will be reused and the damaged one is transferred to a waste treatment facility in the sub-district area, besides that it can also be recycled.
		Plastic packaging materials from consumption of socialization and training activities	<ul> <li>To collect and all plastic materials are transferred to waste processing facilities in the sub-district area, besides that they can also be used as recycling.</li> <li>The use prevented of beverages with plastic packaging and replace with a non-packaged drink</li> </ul>

**C.** Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy of the Adaptation Fund.

As described in Part II-D II-E and II-K about an overview of the environmental and social impacts and risks identified as being relevant to the project / programme..

To ensure that remaining risks are well managed the project management, fully take the management of environmental and social risks into The Environmental and Social Management Plan (ESMP), developed for this project. identifies measures and actions that reduce potentially adverse environmental and social impacts. describes mitigation measures, both from the perspective of mitigating risks at each activity in line with the Environmental and Social Policy of the Adaptation Fund.

Project compliance with relevant rules, regulation, standards and ESP principles – in line with the Environmental and Social Policy of the Adaptation Fund, detailed in the following table :

Table 10. Environment and social risk management in line with ESP Adaptation Fund and than national and sub national policy

Outcomes / Output	Part II-D	Part II – E	E	SP Adaptation Fund	Further assessment procedure and potential prevention and mitigation measures.
Formed communities and local governments awareness in the conservation natural resources	National - First Nationally Determined Contribution (NDC) Republic of Indonesia, 2016 - Presidential	<ul> <li>Presidential Decree No. 121, of 2012</li> <li>Regulation of the Minister of Marine and Fisheries No.16, of 2008</li> </ul>	3	Access and Equity  Marginal and Vulnerable Groups  Gender Equality	<ul> <li>To socialization and awareness activities on The mangrove ecological functions for existence of natural biota;</li> <li>To strengthening capacity with Assistance, mentoring and training;</li> </ul>

1.1.1. Raised awareness of communities and local government in the mangrove ecosystems rehabilitation  1.1.2. Mangrove reforestation activities about 628.800 plants	decree No. 2 of 2015 - RAN-API, 2014 - The Law RI Number 27 of 2007  Sub-National - The provincial government East Kalimantan of Governor Regulation No. 22 of 2011 - The Provincial Regulation of East Kalimantan No.1 of 2016	- Regulation of the Minister of Environment and Forestry No33 of 2016	9	and Women empowerment  Protaction of natural habitat  Climate change	<ul> <li>Training of seeds collection, nursery and mangrove planting;</li> <li>Training of reforestation strategic;</li> <li>Planting mangroves as many 628,800 trees, especially in critical areas, collection and nursery activities;</li> <li>the establish water wave barrier;</li> <li>The Establish plot carbon stock;</li> <li>Assessing impacts and vulnerability in Mahakam Delta.</li> </ul>
Strengthened awareness and ownership of local communities and groups of students related to conservation of mangrove ecosystem as an effort to overcome the impact of climate change	National - First Nationally Determined Contribution (NDC) Republic of Indonesia, 2016 - Presidential Decree No. 2 of 2015 - RAN-API, 2014 - The Law RI Number 27 Year 2007	- Presidential Decree No. 121, of 2012  - Regulation of the Minister of Marine and Fisheries No.16 of 2008  - Regulation of the Minister of Environment and Forestry No.33 of 2016  - Minister Of Environment Regulation No.19 of 2012	2 3 5 9	Access and Equity  Marginal and Vulnerable Groups  Gender Equality and Women empowerment  Protaction of natural habitat  Climate change	<ul> <li>To Provide assistance and the capacity building related to conservation and utilization of mangroves, to local government and direct beneficiaries;</li> <li>To Provide access information to stakeholders in the Mahakam delta of advocacy media and guidebook;</li> <li>To accompany local communities, other vulnerable groups and village govenrment in the planning and implementation of reforestation appropriate strategies each year;</li> </ul>

1.2.1. Increased knowledge among students about the importance of mangrove ecosystem as an effort to preserve natural resource (elementary and junior high school students);  1.2.2. Disseminating learning and awareness about the development of mangrove ecosystem that support alternative sustainable	Sub-National  - The provincial government East Kalimantan of Governor Regulation No. 22, of 2011  - Provincial regulation of east kalimantan no. 7, of 2014  - The Provincial Regulation of East Kalimantan No.1, of 2016		12	Polution Prevention and resources eficiency	<ul> <li>Monitoring and evaluation with stakeholder relevant to ensure the sustainability of the restoration of mangrove ecosystems as ecological service providers of the area that can have a positive impact in maintaining sustainable livelihoods for fishermen;</li> <li>To facilitation "policy brief" as a media advocacy.</li> </ul>
livelihoods.  Encouraging the institutional of policy in the conservation mangrove Ecosystems  2.1.1.  Protected and conserve 100 hectares of mangrove planting in 3 villages, as well as mangrove ecosystem in the area, covering of 21,288 hectares.	National - First Nationally Determined Contribution (NDC) Republic of Indonesia, 2016 - Presidential Decree No. 2 of 2015 - RAN-API, 2014 - The Law RI Number 27 Year 2007  Sub-National - The provincial government East Kalimantan	- Presidential Decree No. 121, 2012  - Regulation of the Minister of Marine and Fisheries No.16 of 2008  - Regulation of the Minister of Environment and Forestry No.P.33 Year 2016  - Minister Of Environment Regulation No.19 of 2012	2 3 5 9 11 12	Access and Equity  Marginal and Vulnerable Group  Gender Equality and Women empowerment  Protaction of natural habitat  Climate change  Polution Prevention and resources eficiency	<ul> <li>To facilitate 9 x FGD in village level, 1x in district level, and 2 x FGD in province level;</li> <li>To facilitate of village rules related to the conservation and utilization of mangroves;</li> <li>To Provide special the strengthening and assistance to improve women's roles and improve gender equality, particularly in to protected and conservation of mangrove ecosystems in 3 villages.</li> </ul>

	of Governor Regulation No. 22, of 2011 - Provincial regulation of east kalimantan no. 7, of 2014 - The Provincial Regulation of East Kalimantan No.1, of 2016				a To Provide againtance
Enhance the capacity of local communities to adapt with climate change impact in mangrove ecosystem;  3.1.1. Increased knowledge and skills of local communities in the application and development of silvofishery Fishponds  3.1.2. Increased knowledge and skills of local communities in the management of non- timber mangrove products as alternative income.	National - Presidential Decree No. 2 of 2015 - RAN-API, 2014 - The Law RI Number 27 Year 2007  Sub-National - The provincial government East Kalimantan of Governor Regulation No. 22, of 2011 - The Provincial Regulation of East Kalimantan No.1, of 2016	- Regulation of the Minister of Marine and Fisheries No.16 of 2008 - Minister Of Environment Regulation No.19 of 2012	2 3 5 11 12	Access and Equity  Marginal and Vulnerable Groups  Gender Equality and Women empowerment  Climate change  Polution Prevention and resources eficiency	<ul> <li>To Provide assistance and the capacity building related to conservation and utilization of mangroves, to local government and direct beneficiaries;</li> <li>To Provide special assistance to the marginalized and vulnerable groups so that they are benefit from the programme being;</li> <li>To mentoring of technical Aquaculture and training of mangrove product non timber for women groups.</li> </ul>

Increased local community income by means the promotion of sustainable alternative economics Development  3.2.1. Demonstration plots Development of silvofishery ponds in 3 villages  3.2.2. Business development of non-timber mangrove product for 6 CBOs of women in 3 villages	National - Presidential Decree No. 2 of 2015 - RAN-API, 2014 - The Law RI Number 27 Year 2007  Sub-National - The provincial government East Kalimantan of Governor Regulation No. 22, of 2011 - The Provincial Regulation of East Kalimantan No.1, of 2016	- Minister of Marine and Fisheries No.16 of 2008 - Minister Of Environment Regulation No.19 of 2012	2 3 5 12	Access and Equity  Marginal and Vulnerable Groups  Gender Equality and Women empowerment  Protaction of natural habitat  Polution Prevention and resources eficiency	•	To facilitated Dike and sluice gate renovation in 9 ponds demplots; Procurement of organic fishery production facilities; To provide Kit monitoring of water quality for silvofishery demplots; To mentoring tehnical implementation silfovishery; To Strengthening technical assistance of mangrove non-timber, which effectively utilizes the mangrove fruit which will be at maximum of 30% of the available fruits in the trees to maintain the balancing of the mangrove ecosystem; To facilitate Procurement of non timber mangrove products processing equipment; Mentoring production and marketing non-timber mangrove product
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#### **D.** Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan.

Monitoring and evaluation is an important, to monitor the extent to which changes occur during program implementation and the impact of the program on climate change (output, outcome and impact), with reference to the established framework / framework. Monitoring and evaluation activities will be conducted every six months by using "Monitoring and evaluation tool", which will be developed by YML. Monitoring will also be conducted for each programme component by involving internal team of programme implementation. The results of monitoring and evaluation will be used as learning process to improve programme management and ensure that programme implementation is on the right track. External monitoring and evaluation will also be conducted twice during programme implementation involving relevant stakeholders. These stakeholders are expected to be able to assess as well as advice programme implementation. Moreover, this process is also important for data collection to develop policy brief in relation to the conservation of mangrove ecosystem and sustainable livelihood. The cost needed for this activity is US \$ 11,011.20.

Table 11. The monitoring and evaluation arrangements

O. Activity INTERNAL	EKSTERNAL	REMARKS
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1	Monthly Monitoring	Performed by program Team (Program Officer/PO)	-	To Used Work plan and Timeline
2	Three Monthly Monitoring and Finance Audit	Performed by PO and Project Coordinator with beneficiaries;	-	To Used Monitoring Tools
3	Six Monthly Monitoring 6/partner progress review (PPR)	-	Performed by Project Team and AF Team with stakeholder Delta Mahakam.	To Used PPR Tool
4	Six Monthly Audit	-	Performed by Project Team and AF Team; To check the effectiveness of fund used	To Used AF Finance form
5	Evaluation	-	Performed by Project team, Multi stakeholder Delta Mahakam with Beneficiaries.	To use an evaluation tools that has been agreed (Funding, Implementation, outcome progress and impact progress)

#### Reporting

To present the results of the activity, the change then, program managers will provide information about the results of monitoring and evaluation into the report / report. The form of a report to be submitted to the relevant parties are:

- 1. The activity report: describes the results obtained from activities and changes began to occur, the reporting is done every month and report the use of the funds have been used:
- 2. Quarterly report: Delivering summary results facilitation and implementation of the program is done every 3 months. This report is also intended to monitor whether the activities carried out are still on the track nor the use of funds;
- 3. Partner progress review report (PPRR): 6-monthly report on the monitoring that includes the development of output, put come and program goals. The report will be submitted to donors and stakeholders.
- 4. Annual Progress Report: The report contains information about changes and developments in the program (output and outcome) or progress in the achievement of planned results during the first years. The report will also be distributed to donors and stakeholders.
- 5. Final Project Report: The report presents the results / progress goals, output, outcome, and the findings of indicator of impact that began to emerge, problems, challenges / obstacles and recommendations to the parties to sustain and replicate the success obtained during the program. This evaluation report will also be decimated to become learning materials Together with the parties that have an interest in the Mahakam delta.

Described the monitoring and evaluation arrangements detail into **annex 02**.

**E.** Include a results framework for the project proposal, including milestones, targets and indicators.

Expected Results	Indicators	Milestones
Goal: Providing technical assistance as well as building the capacity of Local communities to adapt with climate change impacts in mangrove ecosystem in Mahakam Delta		
Impact: Increased resiliency at the community level to cope with climate change impacts in mangrove ecosystems.		
Outcome 1.1: Formed communities and local governments awareness in the conservation natural resources	415 people consisting of 135 communities and local governments, as well as 400 students and teachers in 3 villages have increased their awareness of the importance sustainable natural resource conservation	
Output 1.1.1. Raised awareness of communities and local government in the mangrove	1.1.1.1 135 local people have understand the benefits of mangrove ecosystems for sustainable livelihoods	1st quarter of 2019 2nd quarter of 2019
ecosystems rehabilitation.	1.1.1.2. 60 local people understand about the reforestation stage starting from seed collection, nursery up to mangroves planting	2nd quarter of 2019
	1.1.1.3. 60 local people understand about the arrange and establish the reforestation strategies based on implementation time and planting area priority	3rd quarter of 2019
Output 1.1.2.  Mangrove reforestation activities about 628.800 plants	1.1.2.1. Identified of natural stockiest for local mangrove seeds that were carried out before planting	2nd quarter of 2019 2nd quarter of 2020
in 3 villages;	1.1.2.2. 276 local people directly involved in the collection of mangrove seeds, nursery and mangroves planting	The 2nd to 3rd quarter of 2019 The 2nd to 3rd quarter of 2020

		,
	1.1.2.3. 30 local people handle 6 nurseries, consisting of 12 people who build 6 nursery constructions and 18 people handling nursery care; 48 local people carry out the filling of soil and propagule into polybags in nursery  1.1.2.4. 138 local people planted	The 2nd to 4th quarter of 2019 The 2nd to 3rd quarter of 2020 4th quarter of 2019
	628,800 mangroves for 2 years, consisting of 111 men and 27 women	The 3rd to 4th quarter of 2020
	1.1.2.5. The making of water wave barrier by 3 groups of vulnerable, as a safeguard of mangrove trees planted in coastal areas in the three locations of activities.	4th quarter of 2019
	1.1.2.6. Monitored growth rate and percentage of mangrove life that has been planted in 3 Villages	1st quarter of 2020 4th quarter of 2020
	1.1.2.7. Establishment of 12 carbon measurement plots in 3 villages	4th quarter of 2019 2nd quarter of 2020 4th quarter of 2020
	1.1.2.8. Identified the biophysical, socio-economic and cultural attributes and forcing factors	2nd quarter of 2019 3rd quarter of 2019 1st quarter of 2020 2nd quarter of 2020
Outcome 1.2.: Strengthened awareness and ownership of local communities and groups of students related to conservation of mangrove ecosystem as an effort to overcome the impact of climate change	Increased capacity 400 student and teachers related to conservation of mangrove ecosystem and; Distribution the lesson learned program to stakeholder, like as the form of reports, guidebooks and documentary film programs, used as campaign and awareness materials.	
Output 1.2.1. Increased knowledge among students about the importance of mangrove ecosystem as an effort to preserve natural resources (elementary and junior high school students);	1.2.1.1. 400 students and teachers understand the importance of conservation the environment and mangrove ecosystems	The 2 <sup>nd</sup> until 3 <sup>rd</sup> quarter of 2019 The 2 <sup>nd</sup> until 3 <sup>rd</sup> quarter of 2020
Output 1.2.2. Disseminating learning and awareness about the development of mangrove Ecosystem	1.2.2.1. Writing of 4 guidebook (reforestation strategy, technical Silvofishery, Non-timber mangrove product and carbon stock establishment)	2 <sup>nd</sup> quarter of 2019 1 <sup>st</sup> quarter of 2020
	1.2.2.2. Duplication of guidebook and publication (4x100 expl)	The 2 <sup>nd</sup> until 3 <sup>rd</sup> quarter of 2019 1 <sup>st</sup> quarter of 2020

		3 <sup>rd</sup> quarter of 2020
	1.2.2.3. Writing of report per semester, 20 documents and duplicated	2 <sup>nd</sup> quarter of 2019 1 <sup>st</sup> quarter of 2020 3 <sup>rd</sup> quarter of 2020 The end of December 2020
	1.2.2.4. Writing of policy brief documents	3 <sup>rd</sup> quarter of 2020
	1.2.2.5. Writing of final report, 1 document and duplicated	The end of December 2020
	1.2.2.6. Compiled and established the documentary film	4 <sup>th</sup> quarter of 2020
Outcome 2.1.: Encouraging the institutional of policy in the conservation mangrove Ecosystems	There are 3 draft of the village regulation and 1 policy brief in the conservation of mangrove ecosystems	
Output 2.1.1. Protected and conserve 100 hectares of mangrove planting in 3 villages, as well as mangrove ecosystem in the area, covering of 21,288	2.1.1.1. Implemented of 9 times FGDs at village level (3 x 3 villages) with final input of the village regulation draft concerning balance between social economic activity with Environment	2 <sup>nd</sup> quarter of 2019 1 <sup>st</sup> quarter of 2020 2 <sup>nd</sup> quarter of 2020
hectares.	2.1.1.2. Implemented of 1 time FGD at district level for programmes and policy support	3 <sup>rd</sup> quarter of 2019
	2.1.1.3. Implemented of 2 times FGDs at provincial level for policy alignment in Delta Mahakam and recommendation for compile policy brief	3 <sup>rd</sup> quarter of 2019 1 <sup>st</sup> quarter of 2020
	2.1.1.4. Implemented of 12 times internal monitoring and evaluation in 3 villages	2 <sup>nd</sup> quarter of 2019 3 <sup>rd</sup> quarter of 2019 4 <sup>th</sup> quarter of 2019 1 <sup>st</sup> quarter of 2020 2 <sup>nd</sup> quarter of 2020 3 <sup>rd</sup> quarter of 2020 4 <sup>th</sup> quarter of 2020
	2.1.1.5. Implemented of 6 times external monitoring, evaluation and learning (MEL) in 3 villages with relevant stakeholders at provincial level during programmes duration	2 <sup>nd</sup> quarter of 2019 1 <sup>st</sup> quarter of 2020 3 <sup>rd</sup> quarter of 2020
	2.1.1.6. Implemented of 2 times provincial workshops, the commitment of inter actor for the programmes and the joint recommendation on the sustainability of mangrove ecosystems in Delta Mahakam	4 <sup>th</sup> quarter of 2019 3 <sup>rd</sup> quarter of 2020

Outcome 3.1.: Enhance the capacity of local communities to adapt with climate change impact in mangrove ecosystem;	Increased capacity 201 local community to adapt with climate change impacts in mangrove ecosystem.	
Output 3.1.1 Increased knowledge and skills of local communities in the application and development of silvofishery Fishponds	105 local people understand that environmentally friendly aquaculture will ensure the sustainability and development of their aquaculture.	The 1 <sup>st</sup> until 3 <sup>rd</sup> quarter of 2019 1 <sup>st</sup> quarter of 2020
Output 3.1.2 Increased knowledge and skills of local communities in the management of non-timber mangrove products as alternative income	90 women understood about non timber mangrove products in the form of processed mangrove fruits products as their alternative business.	The 3 <sup>rd</sup> until 4 <sup>th</sup> quarter of 2019
Outcome 3.2.: Increased local community income by means the promotion of sustainable alternative economics development	Existence of support the development of alternatives sustainable livelihood for local communities in 3 villages	
Output 3.2.1. Development of silvofishery ponds in 3 villages	3.2.1.1. 9 silvofishery demonstration plots belong to the community with total area 36 hectares in 3 locations have been done Improvements	The 2 <sup>nd</sup> until 4 <sup>th</sup> quarter of 2019
	3.2.1.2. Mangrove planting in the ponds as many as 800 plants / hectares; Procurement of nonchemical organic fishery production facilities such as organic fertilizers, non-pesticide poisons (saponins), dolomite lime, fermentation of fine rice bran, seeds of tiger prawn and milkfish	3 <sup>rd</sup> quarter of 2019 until 1 <sup>st</sup> quarter of 2020
	3.2.1.3. Procurement of 9 packages of water quality monitoring kits and accessories for 9 demonstration plots.	The 2 <sup>nd</sup> until 3 <sup>rd</sup> quarter of 2019
	3.2.1.4. The carry out mentoring within train 18 aquaculture farmers who are directly involved in the implementation and development of silvofishery Fishponds	2 <sup>nd</sup> quarter of 2019 until 4 <sup>th</sup> quarter of 2020
Output 3.2.2. Business development of non-timber mangrove product for 6 CBOs of women in 3 villages	3.2.2.1. Procurement of 6 packages of mangrove processing tools and procurement of 6 packages of packing tools (hand sealer and vacuum sealer) for 6 CBOs of women	4 <sup>th</sup> quarter of 2019
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3.2.2.2. Mentoring 6 groups of women in maintaining the production quality of mangrove fruit products; market opportunities and marketing strategy
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PMF matrix and logic model are present in annex 3.

## **F.** Demonstrate how the project / programme aligns with the Results Framework of the Adaptation Fund

Project Objective(s)	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
Restoration of Mangrove ecosystems from the impacts of climate change as a sources of Support Economics development;	• 75,012 person (Male= 39,012 and Female= 14,052) or 22% from total communities in 3 sub-district namely Muara Badak, Anggana and Muara Jawa have direct and non direct beneficiaries and impact from Mangrove ecosystems conservation	Formed communities and local governments awareness in the conservation natural resources	415 people consisting of 135 communities and local governments as well as 400 students and teachers in 3 villages have increased their awareness of the importance sustainable natural resource conservation	261,332.40
	Communities and local governments to getting lessons learned in restoring mangrove ecosystems as an effort to overcome the impacts of climate change	Strengthened awareness and ownership of local communities and groups of students related to conservation of Mangrove ecosystem as an effort to overcome the impact of climate change	- Increased capacity 400 student and teachers related to conservation of mangrove ecosystem and; - Distribution the lesson learned program to stakeholder, like as the form of reports, guidebooks and documentary film programs, used as campaign and awareness materials	

2. Strengthening The institutionalization of policy and sustainability of mangrove ecosystem conservation;	3 villages government and local communities in three villages successfully drafted village regulation as an effort to preserve mangrove Ecosystem sustainability	Encouraging the institutional of policy in the conservation mangrove ecosystems	There are 3 draft of the village regulation and 1 policy brief in the conservation of mangrove ecosystems	62,147.10
3. Promoting and to develop of alternative economics development for local community	201 local community in 3 villages have increased their capacity of sustainable livelihood	Enhance the the capacity of local communities to adapt with climate change impact in mangrove ecosystem;	Increased capacity 201 local community to adapt with climate change impacts in Mangrove ecosystem.	183,283.50
	270 local community (female and male) in 3 villages successfully to developed economic (Silvofishery, and mangrove product development non- timber).	Increased local Community income by means the promotion of sustainable alternative economics development	Existence of support the development of Alternatives sustainable livelihood for local communities in 3 villages	

Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
Outcome 1.1: Formed communities and local governments awareness in the conservation natural	515 people consisting of 135 communities and local governments, as well as 400 students and teachers in 3 villages have	Output 1.1.1: Raised awareness of communities and local government in the mangrove Ecosystems rehabilitation	Target 515 local communities, students, and local government have received capacity building to conservation of mangrove ecosystem.	216,433.40
resources	increased their awareness of the importance sustainable natural resource conservation	Output 1.1.2: Mangrove reforestation activities about 628.800 plants in 3 villages;	Reforestation activities, carbon accounting and vulnerability impact analysis in 3 assisted villages have been Conducted	

Outcome 1.2: Strengthened awareness and ownership of local communities and groups of students related to conservation of mangrove ecosystem as	Increased capacity 400 student and teachers related to conservation of mangrove ecosystem and;	Output 1.2.1: Increased knowledge among students about the importance of mangrove ecosystem as an effort to preserve natural resources (elementary and junior high school students);	400 students and teachers understand the importance of conservation the environment and mangrove ecosystems	44,899.00
an effort to overcome the impact of climate change	Distribution the lesson learned program to stakeholder, like as the form of reports, guidebooks and documentary film programs, used as campaign and awareness materials	Output 1.2.2: Disseminating learning and awareness about the development of mangrove ecosystem	Distribution media learning like as: 4 progress report, 1 final report, 4 guidebook, and 1 documenter film, used as awareness and campaign material	
Outcome 2.1: Encouraging the institutional of policy in the conservation mangrove ecosystems	There are 3 draft of the village regulation and 1 policy brief in the conservation of mangrove ecosystems	Output 2.1.1: Protected and conserve 100 hectares of mangrove planting in 3 villages, as well as mangrove ecosystem in the area, covering of 21,288 hectares.	2.1.1.1. Implemented of 9 times FGDs at village level (3 x 3 villages) with final input of the village regulation draft concerning balance between social economic activity with environment  2.1.1.2. Implemented of 1 time FGD at district level for programmes and policy support	62,147.10
			2.1.1.3. Implemented of 2 times FGDs at provincial level for policy alignment in Mahakam Delta and recommendation for compile policy brief  2.1.1.4. Implemented of 12 times internal monitoring and evaluation in 3 villages	

Outcome 3.1: Enhance the capacity of local communities to adapt with climate change impact in mangrove ecosystem	Increased capacity 201 local community to adapt with climate change impacts in mangrove ecosystem	Output 3.1.1: Increased knowledge and skills of local communities in the application and development of Silvofishery fishponds Output 3.1.2: Increased knowledge and skills of local communities in the management of non-timber mangrove products as alternative income	2.1.1.5. Implemented of 6 times external monitoring, evaluation and learning (MEL) in 3 villages with relevant stakeholders at provincial level during programmes duration  2.1.1.6. Implemented of 2 times provincial workshops, the commitment of inter actor for the programmes and the joint recommendation on the sustainability of mangrove ecosystems in Mahakam Delta  105 local people understand that environmentally friendly aquaculture will ensure the sustainability and development of their aquaculture.  90 women understood about non timber mangrove products in the form of processed mangrove fruits products as their alternative business	37,655.10
Outcome 3.2: Increased local Community income by means the promotion of	Existence of support the development of alternatives sustainable livelihood for local communities in 3 villages.	Output 3.2.1: Development of silvofishery ponds in 3Villages	3.2.1.1. 9 silvofishery Demonstration plots belong to the community with total area 36 hectares in 3 locations have been done improvements.	145,628.40

Sustainable alternative Economics development.		3.2.1.2. Mangrove planting in the ponds as many as 800 plants / hectares; and Procurement of non-chemical organic fishery production facilities such as organic fertilizers, non- pesticide poisons (saponins), dolomite lime, fermentation of fine rice bran, seeds of tiger prawn and milkfish;  3.2.1.3. Procurement of 9 packages of water quality monitoring kits and accessories for 9 demonstration plots;  3.2.1.4. The carry out mentoring within train 18 aquaculture farmers who are directly involved in	
		the implementation and development of silvofishery fishponds.	
	Output 3.2.2: Business development of non- timber mangrove product for 6 CBOs of women in 3 villages	3.2.2.1. Procurement of 6 packages of mangrove processing tools and procurement of 6 packages of packing tools (hand sealer and vacuum sealer) for 6 CBOs of women	
		3.2.2.2. Mentoring 6 groups of women in maintaining the production quality of mangrove fruit products; market opportunities and marketing strategy	

**G.** Include a detailed budget with budget notes, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.

	DETAILED BUDGET						
	ADAPTATION FUND PROJECT						
	THE ADAPTATION CLIMATE C	HANGE F	OR SUSTAINA	BLE			
	LIVELIHOODS WITH MANGROVE	BASED I	N MAHAKAM	DELTA			
	(24 MONTHS IN	3 VILLAG	ES)				
No	Item	Vol.	Unit	Cost per unit (US\$)	Total (US \$)		
Compon	ent 1 : Restoration of mangrove ecosyste change as a sources of support ed			climate	261,332.40		
Outcome	e 1.1. : Formed communities and local gov conservation natural resources	ernments	awareness in	the	216,433.44		
Output 1.1.1.	Raised awareness of communities and mangrove ecosystems rehabilitation;	local gov	ernment in the	9	20,449.90		
Input 1.1.1.1.	Socialization of coastal and mangrove Ecosystem	3	Package	1,243.30	3,729.90		
1.1.1.2.	Training of seeds collection, nursery and mangrove planting	3	Package	866.66	2,600.00		
1.1.1.3.	Training of reforestation strategic	3	Package	866.66	2,600.00		
1.1.1.4.	Incentive CO in field (3 person x 3 x 24 month)	72	Month	160.00	11,520.00		
Output 1.1.2.	Mangrove reforestation activities about	628.800 <sub> </sub>	plants in 3 villa	ages	195,983.50		
<b>Input</b> 1.1.2.1.	Survey of seeds stocks by internal team	6	Days	198.31	1,189.90		
1.1.2.2.	Propagules collection	628.800	Propagule		27,667.20		
1.1.2.3.	Nursery activities	6	Nursery		60,364.80		
1.1.2.4.	Mangrove planting 628,800 plants	628.800	Plants		62,880.00		
1.1.2.5.	Water wave barrier	3	pack/village	2,800.00	8,400.00		
1.1.2.6.	Growth Monitoring	12	Frequency	297.40	3,568.80		
1.1.2.7.	Carbon Stock Establishment	3	Package	25,392.00	25,392.00		
1.1.2.8.	Assessing impacts and vulnerability in Mahakam Delta	4	Package	6,520.80	6,520.80		
Outcome 1.2.: Strengthened awareness and ownership of local communities and groups of students related to conservation of mangrove ecosystem							
Output 1.2.1.	Increased knowledge among students about the importance of mangrove ecosystem as an effort to preserve natural resources (elementary and junior high school students);						
<b>Input</b> 1.2.1.1.	Environment campaign in the schools	10	Package	2,150.40	21,504.00		
Output 1.2.2.	Disseminating learning and awareness mangrove ecosystem that support alter				23,395.00		
<b>Input</b> 1.2.2.1.	Guidebook writing	4	Books	400.00	1,600.00		

1.2.2.2.	Duplication of guidebooks and				
1.2.2.2.	Publication(4 guidebooks x 100 copies)	400	Copies	8.00	3,200.00
1.2.2.3.	Writing of report per semester	20	Doc	103.20	2,064.00
1001	Duplicated of reports per semester	120	Copies	3.20	384.00
1.2.2.4.	Writing the policy brief documents	1	Doc	1,500.00	1,500.00
1.2.2.5.	Writing of Final report	1	Doc	344.00	344.00
	Duplicated of final report	30	Copies	12.00	360.00
1.2.2.6.	Compiled and established the documentary film of Adaptation Fund programmes Implementation	1	Doc	4,000.00	4,000.00
1.2.2.7.	Databased, leaning and publication officer	24	Month	336.00	8,064.00
Compon	ent 2: Strengthening the institutionalization mangrove ecosystem conservation	on of polic	cy and sustair	nability of	62,147.10
Outcome	2.1. : Encouraging the institutional of po mangrove Ecosystems	olicy in the	conservation	1	62,147.10
Output 2.1.1.	Protected and conservation 100 hectare Villages	es of man	grove ecosyst	tems in 3	62,147.10
<b>Input</b> 2.1.1.1.	FGDs in villages	12	Package	1,190.66	14,288.00
2.1.1.2.	FGD in district	1	Package	5,728.00	5,728.00
2.1.1.3.	FGDs in province for police brief Recommendation	2	Package	6,301.00	12,602.00
2.1.1.4.	Monitoring and evaluation internal	12	Frequency	528.00	6,336.00
2.1.1.5.	Monitoring and evaluation external with province stakeholder and act	6	Frequency	779.20	4,675.20
2.1.1.6.	Workshop in province	2	Package	7,338.95	14,677.90
2.1.1.7.	Coastal and spatial specialist	48	Frequency	80.00	3,840.00
Compon	ent 3: Promoting and to develop of altern local community.	ative ecor	nomics develo	pment for	183,283.50
Outcome	e 3.1. : Enhance the capacity of local com alternative economies;	munities i	n the develop	ment of	37,655.10
Output 3.1.1.	Increased knowledge and skills of local and development of silvofishery fishpo	communi nds	ties in the ap	plication	19,749.20
<b>Input</b> 3.1.1.1.	Socialization	3	Package	1,202.60	3,608.00
3.1.1.2.	Training of silvofishery pond preparation	3	Package	673.10	2,019.30
3.1.1.3.	Training of silvofishery technic	9	Package	673.10	6,057.90
3.1.1.4.	Silvofishery officer	24	Month	336.00	8,064.00
Output 3.1.2.	Increased knowledge and skills of local communities in the management of non-timber mangrove products as alternative income				
<b>Input</b> 3.1.2.1.	Socialization	3	Package	1,123.30	3,369.90
3.1.2.2.	Training of non-timber mangrove product	6	Package	669.30	4,015.90
3.1.2.3.	Training of processing tools with provide	3	Package	818.70	2,456.10
3.1.2.4.	Reforestation & mangrove product officer	24	Month	336.00	8,064.00

Outcome 3	3.2. : Increased local community income be sustainable alternative economics	_		of	145,628.40
Output 3.2.1	Development of silvofishery ponds in 3	villages			137,430.00
<b>Input</b> 3.2 .1.1	Dike and sluice gate renovation for silvofihsery	36	Hectares	2,079.18	74,850.80
3.2.1.2	Procurement of fishery production facilities	9	Package	4,423.52	39,811.70
3.2.1.3	Kit monitoring procurement of water quality	9	Package	916.92	8,252.30
3.2.1.4	Mentoring in silvofishery demonstration plots	54	Frequency	268.80	14,515.20
Output 3.2.2	Business development of non-timber m women in 3 villages	nangrove	product for 6 (	CBOs of	8,198.40
Input 3.2 .2.1	Procurement of non-timber mangrove products processing equipment	6	Package	560.00	3,360.00
3.2.2.2	Mentoring in production of non-timber 18 Frequency 268.80				4,838.40
TOTAL PROJECT/PROGRAMME COST				506,763.00	
Project/Programme Cycle Management Fee charged by the Implementing Entity					43,074.00
Project/Programme Execution Costs				48,887.00	
Amount	of Financing Requested (US \$)				598,742.00

Details of Project/Programme Execution Cost							
No	Item	Vol.	Unit	@ unit (US\$)	Total (US \$)		
01	Programme Coordinator	24	Month	400.00	9,600.00		
02	Financial officer	24	Month	368.00	8,832.00		
03	Administration officer	24	Month	280.00	6,720.00		
04	Local transport	24	Month	560.00	13,440.00		
05	50% of office rent during the project (1)	2	Years	2,240.00	2,240.00		
06	Office stationery	24	Month	40.00	960.00		
07	Communication and internet	24	Month	80.00	1,920.00		
08	Safety equipment	10	package	64.00	640.00		
09	Projector	1	Unit	549.00	549.00		
10	Portable printer	1	Unit	480.00	480.00		
11	Laptop	1	Unit	850.00	850.00		
12	GPS	1	Unit	256.00	256.00		
13	Audit program	1	package	2,400.00	2,400.00		
Total Project/Pogramme Execution Cost							
	(1)This financing each year is Rp 28,000,000. or (US\$) 2,240 as a form of responsibility YML provides 50% for "office rent" allocation and is expected to support 50% Adaptation						

Fund so that Office Rent total support for 2 years (US\$) 2,240 and contribution YML of (US\$) 2,240

- Based on the above calculation, The Amount of Financing Requested is US\$ 598,742.00
   This funding support will be felt by 137,626 residents so that the cost-per-life effectiveness is US\$ 4.35 / person.
- **H.** Include a disbursement schedule with time-bound milestones.

  Disbursment schedule based on schedule of project/programme implementation as follows:

No	Time	Amount (US \$)	Percentage
1	Early January 2019	239,490.00	40%
2	Early September 2019	239,490.00	40%
3	Early June 2020	119,762.00	20%
	Total Budget	598,742.00	100%

## PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

#### A. Record of endorsement on behalf of the government (\*)

Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:

The endorsement letters are attached

Name, Position, Ministry	Date: (Month, day, year)
Ir. H. Riza Indra Riadi, M.Si. Director of East Kalimantan Provincial Environmental Department	4 April 2017
Drs. Tri Bangun Laksana Director Center of Development Control in Kalimantan Ecoregion, Ministry of Environment and Forestry	4 April 2017

<sup>(\*)</sup> Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

**B.** Implementing Entity certification Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (The Adaptation Climate Change for Sustainable Livelihoods with Mangrove Based in Mahakam Delta) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.



Achmad Nuriyawan
Executing Entity Coordinator

Date: April 4th, 2017

Tel. and email:+62 812 1347 0222, email: yml\_deltamahakam@yahoo.co.id

Project Contact Person: Yayasan Mangrove Lestari Delta Mahakam Address: Pondok Surya Indah, Blok BL 4/6 Jln. P.M. Noor Sempaja, Samarinda, East Kalimantan

Tel.:+62 812 1347 0222, +62 541 4117744 email: <u>yml\_deltamahakam@yahoo.co.id</u>



# PEMERINTAH PROVINSI KALIMANTAN TIMUR DINAS LINGKUNGAN HIDUP

Jalan M.T Haryono Telepon (0541) 760304 – 760305 Fax. (0541) 760302 Samarinda 75124

Samarinda, 4 April 2017

To: The Adaption Fund Board c/o Adaption Fund Board Secretariat Email: Secretariat@Adaptation-Fund.org

Fax: 202 522 3240/5

Subject: Endorsement for The Adaptation and Mitigation Climate Change for Sustainable Livelihoods with Mangrove Based in Mahakam Delta Programme. In my capacity as designated authority for the Adaptation Fund in East Kalimantan Province, I confirm that the above project/programme proposal is in accordance with the government's East Kalimantan Province priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Delta Mahakam area. Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by East Kalimantan Province and executed by Yayasan Mangrove Lestari.

LINGKUNGA

H. Riza Indra Riadi, M.Si Pembina Utama Madya NIP. 19641028 199003 1 009



#### KEMENTERIAN LINGKUNGAN HIDUP DAN KEHUTANAN SEKRETARIAT JENDERAL PUSAT PENGENDALIAN PEMBANGUNAN EKOREGION KALIMANTAN

Jln. Jend. Sudirman No. 19A Balikpapan - Kalimantan Timur Telepon : (0542) 738375, 749206 - Fax : (0542) 749206, 749175

#### Letter of Endorsement by Government

Balikpapan, 4 April 2017

To: The Adaptation Fund Board

c/o Adaptation Fund Board Secretariat Email: Secretariat@Adaptation-Fund.org

Fax: 202 522 3240/5

Subject: Endorsement for The Adaptation and Mitigation Climate Change for Sustainable Livelihoods with Mangrove Based in Mahakam Delta Programme

In my capacity as designated authority for the Adaptation Fund in East Kalimantan Province, I confirm that the above project/programme proposal is in accordance with the government's East Kalimantan Province priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Delta Mahakam area

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented in East Kalimantan Province and executed by Yayasan Mangrove Lestari dan Dipterocarps Ecosystem Research and Development Center

Tri Bangun Laksan

Director



### MINISTRY OF ENVIRONMENT AND FORESTRY DIRECTORATE GENERAL OF CLIMATE CHANGE

Manggala Wanabakti Building Block Block VII 12<sup>th</sup> Floor, Jl. Gatot Subroto – Senayan, Jakarta 10270 Phone +62 21 5730144 Fax. : +62 21 5720194

Website: http://ditjenppi.menlhk.go.id

email: tusetditppi@gmail.com;

Jakarta, April 7, 2017

Ref

:5.100/pp1/mgar-1 pp. 3/4/2017.

Enc

Subject

: Letter of Endorsement

To The Adaptation Fund Board

c/o Adaptation Fund Board Secretariat Email: secretariat@adaptation-fund.org

Fax: 202 522 3240/5

Dear Adaptation Fund Board Secretariat,

I'm writing to you in my capacity as National Designated Authority for the Adaptation Fund in Indonesia. We have received request for endorsement of the following proposals for Adaptation Fund:

- The Mitigation and Adaptation to Support Sustainable Livelihood for Local Communities in Mangrove Ecosystem in the Mahakam Delta, East Kalimantan executed by Yayasan Mangrove Lestari:
- Improving Community's Resilience and Government Policy Response for Climate Change Adaptation in West Papua Province of Indonesia executed by Yayasan Konservasi Strategy Indonesia;
- 3. Developing Community Resilience to Adapt Climate Change in Maratua executed by JAVLEC;
- Build and Strengthen Resilience of Coastal Community Againts Climate Change Impacts by Perempuan Inspirasi Perubahan Pesisir (PINISI) or Women Inspiration for Coastal Change in Bulukumba District executed by Forum Lingkungan Mulawarman;
- Community Adaptation for Forest Food Based Management in Saddang Watershed Ecosystem executed by Konsorsium Adaptasi Perubahan Iklim dan Lingkungan;
- Development of Sustainable Seaweed and Fishery Management for Entrance Community
  Prosperity and Climate Change Adaptation of Coastal and Small Island of Nusa Tenggara Barat
  Province executed by Yayasan Cides.

We see that the proposals are in accordance with the national priorities in implementing adaptation programmes and activities to reduce adverse impacts of, and risks, posed by climate change in the vulnerable regions in Indonesia.

With this consideration, we strongly recommend the six proposals to be granted support from the Adaptation Fund. The programs will be implemented by Partnership for Governance Reform in Indonesia (Kemitraan) and executed by each Executing Agency.

Thank you for your kind consideration.

Yours sincerely,

Dr. Nur Masrinatin

Director General of Climate Change
Ministry of Environment and Forestry of Indonesia/

Netice of Feed Body of Machine

National Focal Point for UNFCCC





#### ANNEX 01.

# The arrangements for project The Adaptation Measures to Support Sustainable Livelihoods for Local Communities in Mangrove Ecosystem in The Mahakam Delta, East Kalimantan

No.	Activity / Component	Result	Sub Activity	Contribution Of Fund	Responsibility Sub Activity	Implemented	Level	Strategy Partner	Quantity	Time
I. PREPA	Preparation of program	The establishment of commitment and understanding of the parties	Coordination and consultation with village government	YML	СО	YML team	Village	Fisheries and agriculture extension workers	3	Jan-Feb 2019
PREPARATION		related to the implementation of the program to be conducted in the Delta	Actor assessment and beneficiaries' groups	YML	СО	YML team	Village	Fisheries and agriculture extension workers	3	
		Mahakam	FGD with vulnerable groups and women groups	YML	СО	YML team	Village	Fisheries and agriculture extension workers	3	
			Socialization program in village	YML	PC	YML team	Village	Village government; Village Stakeholder.	3	
			Coordination and consultation with local government and stakeholder relevant;	YML	PC	YML team	Districh	Bappeda; DKP; DLH.	2	

			Coordination and consultation with local government and stakeholder relevant in provincial	YML	PC	YML team	Provinci al	KPH; Dishut; DLH; DDPI.	2	
I. IMPL	Component 1 Restoration of Mangrove ecosystems from the impacts of climate change as a sources to support economics	<ul> <li>Raised awareness of community and local government in the mangrove ecosystems rehabilitation;</li> <li>Mangrove reforestation activities about 628.800</li> </ul>	Socialization of coastal and mangrove ecosystem	AF	СО	YML Team	Village	Village Government; Local community.	3	Feb-Apr 2019
IMPLEMENTING	development;	plant in 3 villages; • Increased knowledge among 400 students and teacher in 10 school about	Training of seeds collection, nursery and mangrove planting, and training of reforestation strategy	AF	PO	YML Team	Village	Village Government; local community.	3	Mar-Jul 2019
		the importance of mangrove ecosystem as	Survey of seeds stocks by internal team	AF	PO	YML Team	Village	Vulnerability people group	6	Apr-May 2019 Apr-May 2020

an effort to preserve natural resources	Collection of propagule seeds	AF	СО	YML Team	Village	Vulnerability people group	2 period	May-Aug 2019 May-Jul 2020
(elementary and junior high school students);  • Disseminating	activities	AF	СО	YML Team	Village	Vulnerability people group	2 period	May-Nov 2019 May-Oct 2020
learning and awareness about the development of mangrove	Mangrove planting 628,800 plants	AF	PO	YML Team	Village	Vulnerability people group	2	Oct-Dec 2019 Sep-Nov 2020
ecosystem;	Water wave barrier	AF	PO	YML Team	Village	Vulnerability people group	3	Oct-Dec 2019
	Growth Monitoring	AF	СО	YML Team	Village	Vulnerability people group; KPH; Dipterocarfa Research.	12	Jan-Feb 2020 Apr-May 2020 Oct-Dec 2020
	Carbon Stock Establishment	AF	Research Team	YML Team	Village	Dipterocarfa Research; KPH; DDPI.	3	Oct' 2019 Apr' 2020 Oct' 2020
	Assessing impacts and vulnerability in Mahakam Delta	AF	Research Team	YML Team	Village	Dipterocarfa Research; KPH; DDPI; DKP.	4	Apr' 2019 Aug' 2019 Jan' 2020 May' 2020

	Environment champagne in the schools	AF	PO	YML Team	Village, Sub District	SD; SMP, SMA; KPH; DDPI.	10	Jul-Sep 2019 Jul-Sep 2020
	Guidebook writing and preparation "Policy Brief"	AF	PC	YML Team	Program	KPH, DDPI, DKP	4 Guidebook	Mar-May 2019 Jan' 2020
	Duplication of guidebooks and Publication (4 guidebooks x 100 expl)	AF	FO	YML Team	Village; District; Province	Women CBOs; Aquaculture CBOs; local communities ; Local government.	400 copies	Jun-Sep 2019 Feb-Mar 2019 Jul-Aug 2019
	Report of Adaptation Fund programmed implementation per semester and finally	AF	PC	YML Team	Program	Team	20 document; 120 copies	2002010
	Writing Policy brief as a document of recommendation for the actors / stakeholders local, district and provincial	AF	PO	YML Team	Village; District; Province	Beneficiaries ; Local community; Local government; Local NGO's / CBO's; Donor.	1 document; 30 copies	Jul-Sep 2019

		Compiled and established the documentary film	AF	PO	YML Team	Village; District; Province	Beneficiaries ; Local community; Local government; Local NGO's / CBO's; Donor.	1 document	During the program cycle; The final in Nov' 2020
Component 2: Strengthening the institutionalizat ion of policy and	Protected and conserve 100 hectares of mangrove planting in 3 villages, as well	FGDs in villages	AF	СО	YML Team	Village	Village government; Local stakeholder; KPH.	12	Apr-Jun 2019 Jan-Feb 2020 Jun-Jul 2020
sustainability of mangrove ecosystem conservation	as mangrove ecosystem in the area, covering of 21,288 hectares.	FGD in district	AF	РО	YML Team	District	BAPPEDA;, DKP; DLH; KPH.	1	Jul'2019
Conservation	21,200 Hectares.	FGDs in province for police brief recommendation	AF	PC	YML Team	Province	Dipterocarfa Research; KPH; DDPI; DLH; Dishut; DKP.	2	AugSep 2019 Mar-Apr 2020
		Workshop in province	AF	PC	YML Team	Province	Dipterocarfa Research; DDPI; KPH; DLH; Dishut; DKP; BAPPEDA.	2	Oct'2019 Sep'2020
Component 3. Promoting and to develop an	Increased knowledge and skills of	Socialization of sustainable aquaculture	AF	PO	YML Team	Village	DKP	3	Feb-Apr 2019

alternative economics development for local	local communities in the application	Training of silvofishery pond preparation	AF	РО	YML Team	Village	DKP	3	Apr-May 2019
community	and development of silvofishery	Training of silvofishery Technic	AF	РО	YML Team	Village	DKP	9	Jun-Jul 2019
	fishponds and mangrove product non- timber as alternative	Socialization of sustainable alternative livelihood	AF	РО	YML Team	Village	KPH; Local NGO's	3	Jul-Aug 2019
	income.	Training of non- timber mangrove product	AF	РО	YML Team	Village	3 Diva, East Java	6	Aug-Sep 2019
		Training of processing tools with provided	AF	РО	YML Team	Village	3 Diva, East Java	3	Oct-Nov 2019
		Dike and sluice gate renovation for silvofishery demonstration plot	AF	CO	YML Team	Village	DKP	36 hectares	Jul-Aug 2019 Nov-Dec 2019
		Procurement of organic fishery production facilities	AF	PO	YML Team	Village	DKP	9 ponds	Aug-Oc 2019 Jan-Ma 2020
		Kit monitoring procurement of water quality	AF	СО	YML Team	Village	DKP	9 ponds	May-Ju 2019
		Mentoring	AF	РО	YML Team	Village	DKP	54	Jul'2019 Until

										Dec'2020
			Post-Project Mentoring	YML	PC	YML Team	Village	DKP; KPH; Dipterocarfa Research.	8	Mar' 2021 Jun' 2021 Sep' 2021 Dec' 2021
			Procurement of non-timber mangrove products processing equipment	AF	PO	YML Team	Village	Perindagkop	6 packages	Sep-Nov 2019
			Mentoring	AF	PO	YML Team	Village	Local Community Local Government;	18	Nov' 2019 Jan'2020 Mar' 2020 May' 2020 Jul' 2020 Sep'2020 Dec'2020
<b>=</b>	Monitoring, Evaluation and Audit Program	To ensure the program according to the design that has	M & E internal	AF	PC	YML Team	Program	Team	12	May'2019 Until Nov'2020
<b>№</b>	i rogram	been agreed. On the track or not.	M & E external	AF	PC	AF Project Team	Program	District and Provincial Government; Stakeholder in Mahakam Delta.	6	Jun'2019 Jan'2020 Aug'2020
			Post-Project Monitoring	YML	PC	YML Team	Program	Village Government; KPH; Dipterocarfa	6	Jun' 2021 Dec' 2021 Jun' 2022

								Research; Stakeholder relevant.		Dec' 2022
			Audit Program	AF	FO	AF and YML Team	Program	Project document input	2	Dec'2019 until Dec'2020
IV. Project Closing	Delivery Adaptation	To ensure the sustainability of program success and sustainability of learning that has been generated during the	Coordination and consultation	AF and YML	PC	YML Team and Local Government	Village; District; Province	Village Government; District Government; Provincial Government; KPH; DDPI.	4	Dec'2018 Feb'2019 Sep'2019 Jan 2020 Oct' 2019
sing		program,	Consultation With private Sector	YML	PC	YML Team	District; Province	District Government; Provincial Government; Private Sector;	2	Oct'2019 Feb'2021
			Dissemination of learning	AF and YML	PC	YML Team	District; Province	KPH; Provincial Government; DDPI; Private Sector.	2	Jan'2020 Jan'2021
			To establish a synergy with private sector for the rehabilitation of mangrove vegetation	YML and Private Sector	YML KPH	YML Team	District; Province	Private Sector.	1	Jan'2021

Note:		
AF	: Adaptation Fund SD : Primary s	chool KPH : Forestry Taskforce Unit
YML	: Mangrove Lestari Foundation SMP : Junior hig	h school DKP : Marine and Fisheries Department
CO	: Community organizing officer SMA : Secondar	school DLH : Environment Department
PO	: Project officer	Dishut : Forestry department
FO	: Finance & admin officer	DDPI : Sub National Board of Climate Change
PC	: Programme coordinator	BAPPEDA : Regional development and planning agency
		Perindagkop : Department of Industry, Trade and Cooperatives

Schedule of Programme Implementation
The Adaptation Measures to Support Sustainable Livelihoods for Local Communities in Mangrove Ecosystem in The Mahakam Delta, East Kalimantan, Indonesia

											Time	of Im	plmer	ntatio	n (24	1 mo	nths)								
No.	No. Activity							2019	)										20	20					
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
	Programme Preparation	1/19	2/19																						
1.1.1.1.	Sosialization of costal and mangrove ecosystem		2/19	3/19																					
1.1.1.2.	Training of seeds collection, nursery and planting			3/19		5/19																			
1.1.1.3.	Training of reforestation strategic						6/19	7/19																	

1.1.2.1.	Survey of seeds stocks by internal team		4/19												4/20								
1.1.2.2.	Propagule collection			5/19	6/18	7/19									4/20	5/20	6/20	7/20					
1.1.2.3.	Nursery				6/19	7/19	8/19	9/19	10/19	11/19					4/20	5/20	6/20	7/20	8/20				
1.1.2.4.	Mangrove planting 628,800 plants								10/19	11/19									8/20	9/20	10/20		
1.1.2.5.	Water wave barrier								10/19	11/19													
1.1.2.6.	Growth Monitoring											1/20	2/20		4/20	5/20					10/20	11/20	
1.1.2.7.	Carbon Stock Establishment								10/19						4/20						10/20		
1.1.2.8.	Assessing impacts and vulnerability		4/19				8/19					1/20				5/20							
1.2.1.1.	Environment campaign in the schools				6/19		8/19										6/20		8/20				
1.2.2.1.	Guidebook writing	3/19	4/19	5/19								1/20											
1.2.2.2.	Duplication of guidebooks and Publication				6/19	7/19	8/19	10/17					2/20	3/20				7/20	8/20				
1.2.2.3.	Writing of report per semester				6/19						12/19						6/20						12/20
1.2.2.4.	Writing the policy brief documents																	7/20	8/20	9/20			
1.2.2.5.	Writing of Final report																						12/20
1.2.2.6.	Compiled and established the documentary film																				10/20	11/20	
2.1.1.1.	FGDs in villages		4/19		6/19							1/20	2/20				6/20	7/20					
2.1.1.2.	FGD in District					7/19																	
2.1.1.3.	FGDs in Province							9/19							4/20								
2.1.1.4.	Monitoring and evaluation internal			5/19			8/19			11/19			2/20			5/20			8/20			11/20	

2.1.1.5.	Monitoring and evaluation external					6/19							1/20							8/20				
2.1.1.6.	Workshop in province									10/19											9/20			
3.1.1.1.	Socialization of sustainable aquaculture	2/19	3/19																					
3.1.1.2.	Training of silvofishery pond preparation			4/19																				
3.1.1.3.	Training of silvofishery Technic					6/19	7/19					12/19	1/208											
3.1.2.1.	Socialization of sustainable alternative livelihood							8/19																
3.1.2.2.	Training of mangrove product non-timber								9/19															
3.1.2.3.	Training of processing tools with provide									10/19														
3.2.1.1.	Dike and sluice gate renovation for silvofishery "demplots"						7/19	8/19			11/19	12/19												
3.2.1.2.	Procurement of fishery production facilities							8/19	9/19	10/19			1/20	2/20	3/20									
3.2.1.3.	Kit monitoring procurement of water quality				5/19	6/19																		
3.2.1.4.	Mentoring in silvofishery demonstration plots					7/19	7/19	8/19	9/19	10/19	11/19	12/19	1/20	2/20	3/20	4/208	5/20	6/20	7/20	8/20	9/20	10/20	11/20	
3.2.2.1.	Procurement of non- timber mangrove products processing equipment								9/19	10/19														
3.2.2.2.	Mentoring in production of non-										11/19		1/20		3/20		5/20		7/20		9/20			

	timber ma product	angrove															
Annotation : Preparation		Implen	nentat	ion oi	activit	'y											

## ANNEX 02.

## MONITORING, EVALUATION AND LEARNING FRAMEWORK THE ADAPTATION MEASURES TO SUPPORT SUSTAINABLE LIVELIHOODS FOR LOCAL COMMUNITIES IN MANGROVE ECOSYSTEM IN THE MAHAKAM DELTA, EAST KALIMANTAN

PROJECT RESULTS INDICATOR	METHODS	VERIFICATION	RESPONSIBLE	PARTICIPANT/ BENEFICIARIES
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GOAL	<ol> <li>Restoration of mangrove ecosystems from the impacts of climate change as a sources to support economics development in 3 villages;</li> <li>Strengthening the institutionalization of policy and sustainability of mangrove ecosystem conservation in Delta Mahakam;</li> <li>Promoting and to develop an alternative economics development for local community in 3 villages;</li> </ol>	FGD Deep Interview Observation Data Analysis Analysis Regulation	Finally Report	Project Team & AF	Local Government; Local Community; Students and teachers; District Government; Provincial Government; Stakeholder Relevant.
		OUTCOME			
1.1. Formed communities and local governments awareness in the conservation natural resources;	415 people consisting of 135 communities and local governments, as well as 400 students and teachers in 3 villages have increased their awareness of the importance sustainable natural resource conservation;	FGD Deep interview	Annual Report Notulensi	Project Team & AF	Local Community; Students and teachers; Local Government.
1.2. Strengthened awareness and ownership of local communities and groups of students related to conservation of mangrove ecosystem as an effort to overcome the impact of climate change.	Increased capacity 400 student and teachers related to preservation of mangrove ecosystem and; Distribution the lesson learned program to stakeholder, like as the form of reports, guidebooks and documentary film programs, used as	FGD Deep Interview Observation	PPR Report	Project Team & AF	Local Government; Local Community; Students and teachers; Provincial Government; Stakeholder Relevant.

	campaign and awareness materials;				
2.1. Encouraging the institutional of policy in the conservation mangrove ecosystems.	There are 3 draft of the village regulation and 1 policy brief in the conservation of mangrove ecosystem;	FGD Deep Interview Observation Analysis Regulation	Annual Report PPR Report	Project Team & AF	Local Government; Local Community; Students and teachers; District Government; Provincial Government; Stakeholder Relevant.
3.1 Enhance the the capacity of local communities to adapt with climate change impact in mangrove ecosystem;	Increased capacity 201 local community to adapt with climate change impacts in mangrove;	FGD Deep interview	PPR Report Annual Report	Project Team	Local Community; Local Government; Stakeholder Relevant.
3.2. Increased local community income by means the promotion of sustainable alternative economics development.	Existence of support the development of alternatives sustainable livelihood for local community in 3 villages;	FGD Deep Interview Observation	PPR Report	Project Team & AF	Local Community; Local Government; Stakeholder Relevant.
		OUTPUT			
1.1.1. Raised awareness of community and local government in the mangrove ecosystems rehabilitation;	535 people consisting of 135 communities and local governments, as well as 400 students and teachers have received capacity building to conservation of mangrove ecosystem;	FGD Deep Interview	Quarterly Report	Project Team	Local Community; Students and teachers; Local Government.
1.1.2. Mangrove reforestation activities about	Reforestation activities, carbon accounting and vulnerability impact analysis in 3 assisted villages have been conducted;	FGD Observation	Activity Report	Project Team	Local Community; Students and teachers; Local Government.

628.800 plant in 3 villages;					
1.2.1. Increased knowledge among students about the importance of mangrove ecosystem as an effort to preserve natural resources (elementary and junior high school students);	400 students and teachers understand the importance of conservation the environment and mangrove ecosystems;	FGD Deep Interview	Quarterly Report	Project Team	Students and teachers; Local Government.
1.2.2. Disseminating learning and awareness about the development of mangrove ecosystem.	Distribution media learning like as 4 progress report, 1 final report, 4 guidebook, and 1 documenter film, poster used as awareness and campaign material;	FGD Observation	Annual Report PPR Report	Project Team	Local Government; Local Community; Students and teachers; District Government; Provincial Government; Stakeholder Relevant.
2.1.1. Protected and conserve 100 hectares of mangrove planting in 3 villages, as well as mangrove ecosystem in the area, covering of 21,288 hectares.	There are 3 draft of the village regulation and 1 policy brief in the conservation of mangrove ecosystem.	FGD Observation	Annual Report	Project Team	Local Government; Local Community; Students and teachers; District Government; Provincial Government; Stakeholder Relevant.
3.1.1. Increased knowledge and skills of local communities in the application and development of	105 local people understand that environmentally friendly aquaculture will ensure the sustainability and	FGD Deep Interview	Activity Report	Project Team	Local Community; Local Government.

silvofishery fishponds;	development of their aquaculture;				
3.1.2. Increased knowledge and skills of local community in the management of non timber mangrove product as alternative income;	90 women understood about non timber mangrove products in the form of processed mangrove fruits products as their alternative business;	FGD Deep Interview	Activity Report	Project Team	Local Community; Local Government.
3.2.1. Development of silvofishery pond in 3 villages;	Increased capacity 201 local community to adapt with climate change impact in mangrove ecosystem;	FGD Deep Interview Observation	Activity Report	Project Team	Local Community; Local Government; District Government.
3.2.2. Business development of non timber mangrove product for 6 CBO's of women in 3 villages.	Existence of support the development of alternatives sustainable livelihood for 270 local community in 3 villages.	FGD Deep Interview Observation	Quarterly Report	Project Team	Local Community; Local Government; District Government.

## **ANNEX 03**

## PERFORMANCE MEASUREMENT FRAMEWORK (PMF) THE ADAPTATION MEASURES TO SUPPORT SUSTAINABLE LIVELIHOODS FOR LOCAL COMMUNITIES IN MANGROVE ECOSYSTEM IN THE MAHAKAM DELTA, EAST KALIMANTAN

NO.	OUTCOMES/ OUTPUT	INDICATORS	BASELINE	TARGET	DATA SOURCES	DATA COLLECTION METHODS	FREQUENCY	RESPONSIBILTY
Com		estoration of mangro evelopment	ve ecosystems f	from the impacts of cli	mate change	e as a sources t	o support eco	nomics
1	1.1. Formed communities and local governments awareness in the conservation natural resources;	745 people consisting of 210 beneficiaries, 135 communities and local government as well as 400 student and teachers in 3 villages have increased their awareness of the importance sustainable natural resource conservation	The slightingly of awareness and understanding the local community and local government for restoration of mangroves	Availability local communities and village governments have awareness of the maintaining and protect 21.288 hectares mangrove in the project intervention area or 18 % of the mangrove ecosystem area in the Mahakam Delta.	Project Report	Document Analysis FGD Deep interview	Annual	Project Team
	Output 1.1.1 Raised awareness of community and local government in the mangrove ecosystems rehabilitation;	745 people consisting of 135 communities and local governments, 210 beneficiaries as well as 400 students and teachers have received capacity building to conservation of mangrove ecosystem;	0	First year  135 community and village government; 210 beneficiaries, have understand the benefits of mangrove ecosystems for the life and sustainability of the livelihoods of the community.  Second year  345 communities receive knowledge of	Project Report	Document Analysis FGD Deep interview	Annual Mid term	Project Team

			management sustainable mangrove ecosystem.				
Output 1.1.2 Mangrove reforestation activities about 628.800 plant in 3 villages;	Reforestation activities, carbon accounting and vulnerability impact analysis in 3 assisted villages have been conducted; and 276 beneficiaries involved in the collection of mangrove seeds, nursery and mangroves planting;	0	First year  - 60% of mangroves have been embedded in the coastal critical zone;  - 100% of mangroves have been embedded in fish ponds;  - Establishment of 6 permanent sample plots of Carbon Stock;  - It has been doing M & E growth mangrove planting age of 3 months.  Second year  - 40% of mangroves have been embedded in the coastal critical zone;  - Establishment of 3 permanent sample plots of Carbon Stock;  - It has been doing M & E growth mangrove planting age of 3	Project Report	Document Analysis FGD Deep interview	Annual Mid term	Project Tea

			months, 6 months and 1 year.				
1.2. Strengthened awareness and ownership of local communities and groups of students related to conservation of mangrove ecosystem as an effort to overcome the impact of climate change.	<ul> <li>Increased capacity 400 student and teachers related to conservation of mangrove ecosystem and;</li> <li>Distribution the lesson learned program to stakeholder, like as the form of reports, guidebooks and documentary film programs, used as campaign and awareness materials;</li> </ul>	The slightingly of awareness & knowledge of students and teachers about the importance of mangrove ecosystem for environmental sustainability	<ul> <li>400 student and teachers from 10 School have increased related to conservation of mangrove ecosystem until the end of project;</li> <li>There are 1 documentary film, 4 guidebooks, and poster used as awareness and campaign material until the end of project.</li> </ul>	Project Report	Document Analysis FGD Deep interview	Annual	Poject Tear
Output 1.2.1 Increased knowledge among students about the importance of mangrove ecosystem as an effort to preserve natural resources (elementary and junior high	400 students and teachers understand the importance of conservation the environment and mangrove ecosystems;	0	First year 240 students and teachers (6 schools) have understand the benefits of mangrove ecosystems for the life and sustainability of the livelihoods of the community.  Second year 160 students and teachers (4 schools) have understand the	Project Report	Document Analysis FGD Deep interview	Annual Mid term	Project Tea

	school students);			benefits of mangrove ecosystems for the life and sustainability of the livelihoods of the community.				
	Output 1.2.2. Disseminating learning and awareness about the development of mangrove ecosystem;	Distribution media learning like as 4 progress report, 1 final report, 4 guidebook, and 1 documenter film, poster used as awareness and campaign material;	0	First year  There are 4 guidebooks and has been duplicated as many as 400 books (@ 100 books);  Distributed 200 guidebooks to the community and other inter-actor.  Second year  There is 1 documentary film of project implementation;  Distributed 200 guidebooks to the community and other inter-actor;  There is a poster for environmental awareness campaigns.	Project Report	Document Analysis FGD Deep interview	Annual Mid term	Project Team
Com	ponent 2.000: S	trengthening the inst	itutionalization	of policy and sustainab	ility of mang	grove ecosyster	m conservation	);
2	2.1 Encouraging the institutional	There are 3 draft of the village regulation and 1	Local institutional have not	There are 3 draft of the village regulation and 1 policy brief in	Project Report	Document Analysis	Annual End the project	Project Team

Output 2.1.1 Protected and conserve 100 hectares of mangrove planting in 3 villages, as well as mangrove ecosystem in the area, covering of 21,288 hectares.  There are 3 draft of the village regulation and 1 policy brief in the conservation of mangrove ecosystem;  Second year  There are 3 draft of the village regulation of 3 times FGD; The implementation of 9 M & E times; The publication of 2 draft of village regulations.  Second year The implementation of 4 times FGD; The implementation of 4 times FGD; The implementation of 4 times FGD; The implementation of 9 M & E times; The publication of 1 draft of village regulations; The publication of 1 draft of village regulations; The publication of 1 policy brief.	of policy in the conservation mangrove ecosystems	policy brief in the conservation of mangrove ecosystem;	understanding of the importance local regulation for sustainable mangrove ecosystem	the conservation of mangrove ecosystem until the end of the project		FGD  Deep interview  Regulation Analysis		
Component 3.000: Promoting and to develop of alternative economics development for Local Community	Protected and conserve 100 hectares of mangrove planting in 3 villages, as well as mangrove ecosystem in the area, covering of 21,288 hectares.	the village regulation and 1 policy brief in the conservation of mangrove ecosystem; There are 3 draft of the village regulation and 1 policy brief in the conservation of mangrove ecosystem;		- The implementation of 9 times FGD; - The implementation of 1 workshop; - The implementation of 9 M & E times; - The publication of 2 draft of village regulations.  Second year - The implementation of 4 times FGD; - The implementation of 1 workshop; - The implementation of 9 M & E times; - The publication of 1 draft of village regulations; - The publication of 1 policy brief.	Report	Analysis FGD Deep interview	annual	Project Team

3	3.1  Enhance the capacity of local communities to adapt with climate change impact in mangrove ecosystem;	Increased capacity 201 local community to adapt with climate change impacts in mangrove;	210 local community have not capacity to adapt climate change impact in mangrove ecosystem	210 local community and local government have increased capacity to adapt with climate change impacts in mangrove ecosystem until the end of the project.	Project Report	FGD Deep Interview Observation Beneficiaries Satisfaction	Annual	Project Team
	Output 3.1.1. Increased knowledge and skills of local communities in the application and development of silvofishery fishponds;	111 local people understand that environmentally friendly aquaculture will ensure the sustainability and development of their aquaculture;	0	First year  There are 3 times socialization of the application of environmentally friendly ponds;  There are 9 times technical training of environmentally friendly aquaculture management (silvofishery);  105 fish farmers and 6 people from the village administration in 3 villages have gained technical knowledge of environmentally friendly aquaculture management.  Second year  There are 3 times of advanced training on	Project Report	Document Analysis FGD Deep interview	Annual Mid term	Project Team

			silvofishery technical management; - The existence of a complete annual report on the application of the silvofisery ponds.				
Output 3.1.2 Increased knowledge and skills of local community in the management of non timber mangrove product as alternative income;	90 women understood about non timber mangrove products in the form of processed mangrove fruits products as their alternative business;	0	First year  75% of non-timber mangrove product group members have understanding about mangrove processing process become economical product;  6 groups of women in the 3 locations have been trained in non-timber mangrove processing.  Second year  6 groups of women have been trained in non-timber mangrove production.	Project Report	Document Analysis FGD Deep interview	Annual Mid term	Project Team
3.2. Increased local community income by means the promotion of sustainable	Existence of support the development of alternatives sustainable livelihood for local	Local communities do not understand the importance of managing the	<ul> <li>Increased incomes of aquaculture community by 33.3% or US \$ 261.75 / month / family from</li> </ul>	Project Report	Document Analysis FGD	Annual End the project	Project Team

alternative economics developme	community in 3 villages;	sustainable livelihood	previous income of 290.75 / month / family; The results of non-timber		Deep interview		
			mangrove product activities will be increased the household income of 10 until 15 % per years.				
Output 3.2 Developme silvofishery pond in 3 villages;	0041	0	First year  - 36 hectares (9 demonstration plots) have been repaired embankments and sluices (ponds inlet);  - 9 silvofishery demonstration plots have been procurement of fishery production facilities;  - 9 silvofishery demonstration plots have been received a monitoring kit of water quality;  - Has been done 18 times the assistance in 9 demonstration plots silvofishery (2 times the assistance	Project Report	Document Analysis FGD Deep interview	Annual	Project Team

per demonstration plot).	
Second year  - 36 assistances were conducted in 9 demonstration plots of silvofishery (4 times per demonstration plots);  - 201 local communities have been received practice and direct learning through 9 demonstration plots of silvofishery.	

