



ADAPTATION FUND

## **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 N7-700  
Washington, D.C.,  
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## PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

### PART I: PROJECT/PROGRAMME INFORMATION

Project/Program Category	: Small Sized Project Program
Country/ies	: Indonesia
Title of Project/Program	: Village Based Coastal Adaptation and Resilience in Lombok Province of West Nusa Tenggara
Type of Implementing Entity	: National Implementing Entity
Implementing Entity	: Kemitraan – Partnership for Governance Reform
Executing Entity/ies	: <b>Lombok Climate Change Consortium (LC3)</b>
Amount of Financing Requested:	998,739 (in U.S Dollars Equivalent)

### Project / Programme Background and Context:

*Provide brief information on the problem the proposed project/programme is aiming to solve. Outline the economic social, development and environmental context in which the project would operate.*

#### **General Context**

- 1 The area of Lombok Island reaches 4,739 km<sup>2</sup> and included in the small island category if refers to the Barbados Conference (1994) due to its area is not more than 10,000 km<sup>2</sup>. Small islands are characterized by limited resources, remoteness, vulnerability to natural disasters and external shocks as well as excessive dependence on external trade and fragile environment (IPCC, 2014)
- 2 One of the most prominent vulnerabilities of Lombok Island can be found in the marine and coastal sectors as was stated in the Climate Resilience Development Policy 2020-2045 (BAPPENAS, 2020). Of the 10 districts/cities in the Province of NTB, there are four districts on Lombok Island which are in the top priority category and one of them is the district of West Lombok. The characteristics of vulnerability of the coastal areas in West Nusa Tenggara are the threat of climate change-induced disasters such as tidal flooding, abrasion, and landslides (figure 1).



Figure 1. Map of disaster-prone locations in coastal areas in Province of NTB  
Source: NTB Climate Change Adaptation Action Plan 2019-2023.

- 3 West Lombok is one of district that are vulnerable to tidal flooding' threat as shown in the Vulnerability Index Data Information System (VIDS) by MoEF (2018) and Disaster Risk Index (DRI) as National Board for Disaster Management' report (2021). The Exposure and Sensitivity Index of West Lombok is included in the 'medium' category (VIDS, 2018) and the 'high' risk index for disaster threats according to the DRI (2021) as shown in Figure 2 below:

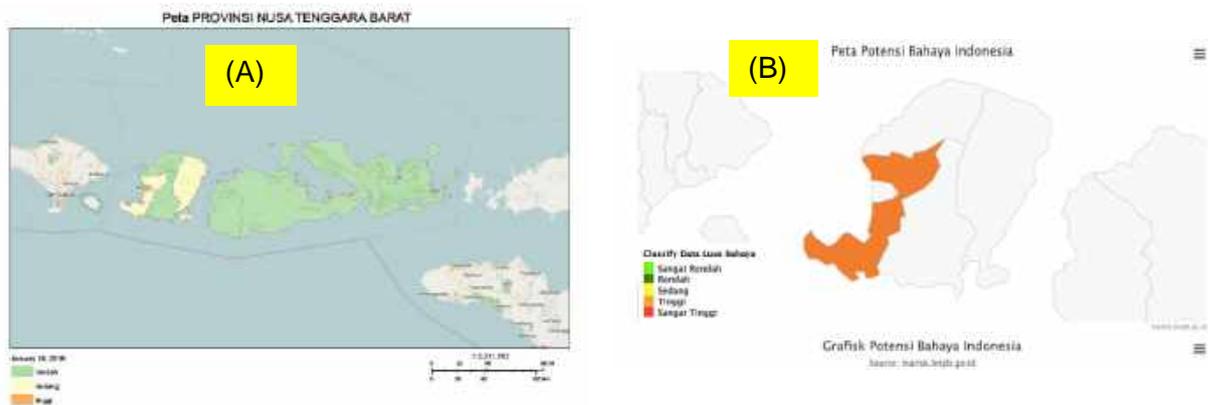


Figure 2. (A) Vulnerability category of West Lombok based on VIDS (2018) and (B) Vulnerability category of West Lombok (DRI, 2021)

4. There are two sub-districts that are very vulnerable to tidal flooding (rob) disasters in West Lombok Regency: Lembar and Sekotong. Rob occurs repeatedly every year with an intensity of 4-8 times around November, February, and May (BPBD NTB, 2019). However, rob can occur at any time and unpredictable.



Figure 3. Tidal flooding in sub-district of Lembar on May 2022

At the village level in the two sub-districts, there are 6 villages classified being medium up to high risk of tidal flooding if refers to the vulnerability assessment (see table 1).

Table 1. Analysis of community level risks to tidal flooding disaster in coastal areas at sub-districts of Sekotong and Lembar, district of West Lombok, Province of West Nusa Tenggara

Sub-district	Name of Village	Level of Exposure	Level of Sensitivity	Level of Adaptation	Level of Vulnerability
Sekotong	Sendi Manik	High	Medium	Medium	Medium
	Sekotong Tengah	Low	High	Medium	Medium
	Sekotong Barat	Medium	High	Low	High
Lembar	Lembar	High	High	Medium	High
	Labuhan Tereng	High	High	Medium	High
	Lembar Selatan	High	High	Medium	High

Source: Journal Belantara, Andi C Ichsan (2018)

- 5 The management of disasters and vulnerabilities in coastal areas has been mandated in the NTB Climate Change Adaptation Action Plan 2019-2023 on the explanations related to the marine sector and small islands (p.100). The coastal area of Lombok is the most vulnerable to the climate change impacts if we associated with various phenomena such as physical changes of area, behavior changes in fishing by fishermen, and changes in livelihood patterns. Markum et al (2008) also reported changes in three coastal areas of Lombok Island, including Lembar, were indicated by 1) the distance from the shoreline to settlements is closer, 2) decreased of days at sea by around 40% from the normal situation of 15-20 days per month due to high waves and tidal flooding, and 3) decreasing catches both in quantity and quality of fish while non-fisherman job opportunities are very limited.
- 6 Not only fishermen, the rob also impacted on farmers because it has inundated the area up to 300 m from the shoreline with an affected people around 350 household. Not only fishermen, the rob also has an impact on farmers because it has inundated the area up to 300 m from the shoreline with the affected population of around 350 families. Along the coastal areas of Lembar and Sekotong is agricultural lands with most of them are gardens and dry fields (70%), as well as the rest are rice fields (30%). The total agricultural area of the 6 coastal villages in Lembar and Sekotong is 1,461 ha or 10.5% of the total land area. The impact of tidal flooding (rob) estimated able to inundate about 20% or 292 ha covering settlements and agricultural land in coastal areas (gardens and rice fields). The value of losses suffered by farmers as rob-related reaches total of IDR 2.5 billion per year due to rice harvest failure, damaged gardens, and livestock diseases. Losses were mainly suffered by villagers with high vulnerability (Figure 4).

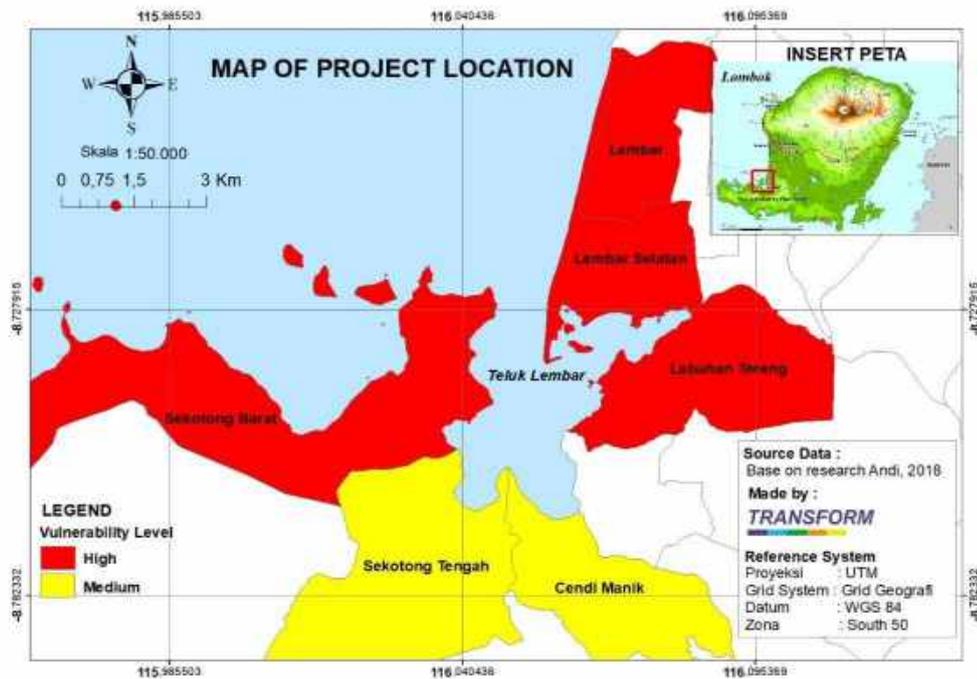


Figure 4. Locations of villages affected by the tidal wave based on their level of vulnerability in Lembar and Sekotong, District of West Lombok.  
Source: Map delineation based on Andi's research (2018)

### Climate Change Context

- 7 According to the BMKG data series, there have been changes in rainfall, the number of rainy days, and air temperature over the last 10 years (NTB Climate Change Adaptation Plan, 2019). The range of rainfall in the Lembar and Sekotong Districts is between 1500-2500 mm/year. The air temperature was increased by an average of 0.2°C every 10 years, the number of rainy days has decreased with greater rainfall intensity while increasingly erratic rain cycle. Changes of these climatic parameters affected to sea anomalies and fluctuations in plant production which are sensitive to rainfall changing (Figure 5).

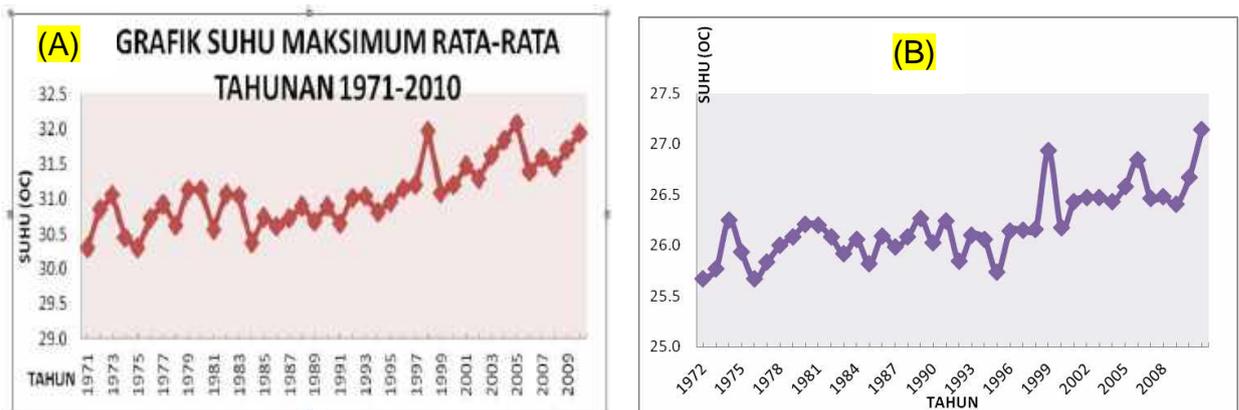


Figure 4. Graph of average temperature and average maximum temperature in 1971 – 2009  
Source: Climatology Station of West Lombok, 2016

- 8 The figure above shows the trend of increasing temperature from 1971 to 2009 which averaged 0.5°C and the maximum temperature increase was around 0.8°C. There is also an increase of the cumulative temperature from 30.5°C in 1971 to 31.5°C in 2009. Thus, there has been increased of 1°C in temperature over the last 40 years. The increased temperature is relatively fast because according to Houghton (1997) that the time tolerance for an increase of 1°C in 100 years. It is predicted that the temperature has increased abnormally. How about the rainfall? If

the temperature tends to increase, the rainfall looked to fluctuate (Figure 5).

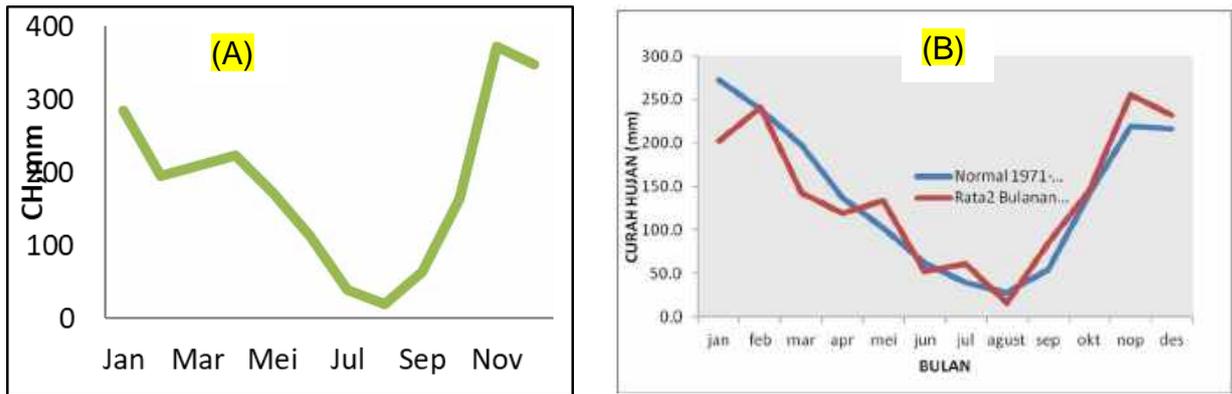


Figure 5. Average monthly rainfall in 1971-2010 (A) and average monthly rainfall in 2010 – 2020 (B)  
Source: BMKG of West Lombok, 2021

- 9 Based on the figure above, it shows that there is a tendency to increase the amount of rainfall over the last 10 years (B) rather than the previous 20 years (A). The highest amount of rainfall was in November which reached an average of 380 mm/month compared to the previous 20 years of around 280 mm/month. The implication of high rainfall can trigger flooding and affect the possibility of increased tidal intensity.
- 10 WWF (2012) has projected that there has been a sea level rise of 0.7-1 m until 2010 with the most affected areas are city of Mataram and district of West Lombok as well as categorized as high and very high vulnerability covering the area affected is 4,686 ha. Markum et al (2008) also reported changing in the coastline of the Lombok Island which was getting closer to the mainland by 2-10 m during the last 10 years in (Figure 6).

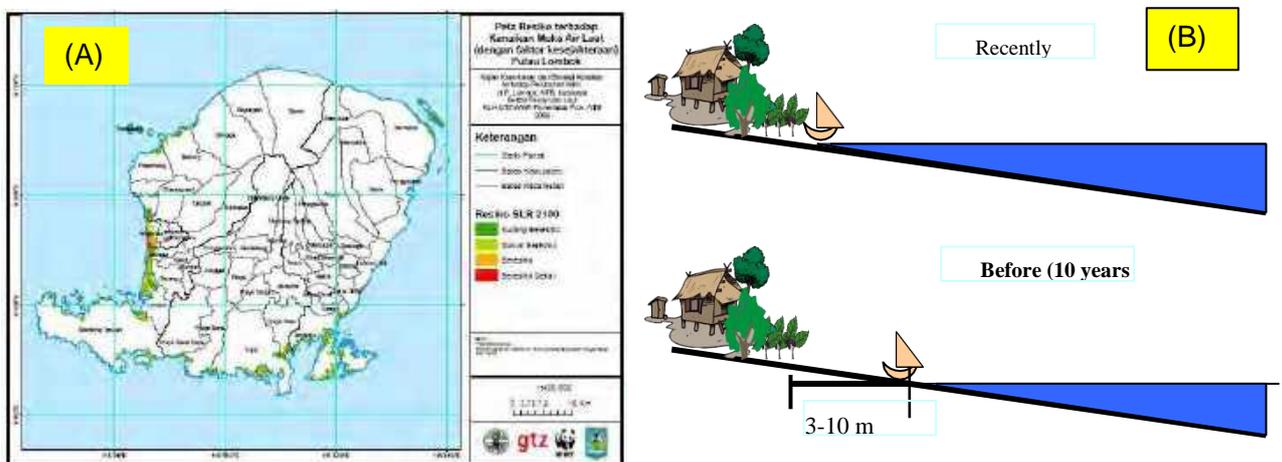


Figure 6. (A) Projection of affected-areas by sea level rise until 2010 (WWF, 2012) and an overview of 10-year coastline shift in Lombok Island (Markum et al, 2008).

### Socio economic context

- 11 Based on statistical data (BPS, 2020), the total population of six vulnerable villages which affected by tidal flooding is 13,204 households or about 47,570 people. Most of their income sources are fishermen (50%) and farmers (18%). For farmers, they are land owners, farm laborers, and cattle-farmers. Rice production in coastal areas is around 3-4 tons/ha or smaller than the upstream and middle areas of 4-6 tons/ha (NTB Provincial Agriculture Office, 2019). The low rice production due to water conditions which are influenced by tides and the intensity

of tidal waves. The average tenure of agricultural land is only 0.2-0.5 ha with total income of farmer around IDR 6-18 million/year including income from livestock.

- 12 For fishermen, they are small fishermen with small canoes (using paddles) and middle fishermen with motorized canoes (ketinting). The income of fishermen is more uncertain than that of farmers. In normal sea water conditions, fishermen usually go to sea with a range of 15-20 days a month. If the waves are medium and high, the number of days at sea decreases. For small fishermen, they go to sea with an allocation of 6-12 hours. Currently, fishermen's productive days are decreasing. They have productive time between 6-7 months a year and the rest are mostly unemployed (Markum, 2008).

Table 2. Description of coastal community livelihood and income in 6 affected-villages by tidal flooding at sub districts Lembar and Sekotong

Jobs	Sources of incomes	Range of incomes (IDR/year)	Unit	Remarks
Farmer	Garden	8 - 14	million/ha	An average of land ownership is 0,2-0,5 hectares
	Rice-fields	8 - 24	million/ha	
	Livestock	6 - 12	Million	
	Garden+Rice-fields+ Livestock	20 - 36	million/ha	
Fishermen	Small Fishermen	7 - 14	million/ha	Paddles
	Middle Fishermen	12 – 18	million/ha	<i>Ketinting</i>

Source \*) NTB Provincial Agricultural Office, 2019; \*\*) Maretha, 2012

- 13 The impact of the tidal flood is the loss of job opportunities for fishermen, the risk of crop failure and crop failure for farmers, damage to garden crops, and disease in livestock. Another impact is the disruption of school activities by reducing children's learning time at school for 2-5 days when the rob occurs, as well as their susceptibility to disease attacks. Data from the Health Service of West Lombok (2012) showed that Lembar and Sekotong are two sub-districts with the number of diarrhea sufferers (5,238 cases) higher than the two closest sub-districts (4,807 cases). Thus, the tidal flood has emergence weak community resilience to economic and social livelihoods.

### **Project Context**

- 14 Based on the description of the factual conditions above and aligned with the NTB Climate Change Adaptation Action Plan 2019-2023 (BAPPEDA NTB, 2019) and the National Climate Resilience Development Policy 2020-2045 (BAPPENAS, 2020), we argued that this project interventions are needed to respond these. At least, there are three main issues to be addressed as the root of problem in the targeted-site. *First*, the occurrence of tidal flooding has always been repeated in the last 20 years. This means that efforts to reduce tidal flooding' impacts by various parties have not been effective; *Second*, the tidal flooding has impacted on the weakening of community's livelihoods due to the loss of job opportunities and the decline in productive activities as well as disruption of education and public health aspects; *Third*, repeatedly tidal waves, not only due to natural anomalies induced by climate change, but also the unavailability of adequate infrastructure for supporting it, both naturally and artificially.
- 15 Actually, the Government has been concerned to overcome the tidal flooding disaster through the initiation of villages developing such as (1) Disaster Resilient Villages (DESTANA), Pro-Climate Villages (Proklim), and Tourism Villages as shown in the following Table 3.

Table 3. Disaster management initiatives in six villages in Lembar and Sekotong districts through the determination of village status

District	Name of Village	Disaster Resilient Village (Destana)	Climate Program	Village	Tourism Village
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(Proklam)				
Sekotong	Cendi Manik	√	√	√
	Sekotong Tengah	√	√	√
	Sekotong Barat	√		√
Lembar	Lembar			
	Labuhan Tereng	√	√	
	Lembar Selatan	√	√	√
Source	BPBD <sup>1</sup> NTB Province, 2021	DLHK <sup>2</sup> NTB Province, 2021	West Lombok Regency Website	

- 16 Various determinations of the status of the village, of course, can contribute to disaster reduction in the region. However, the fact is that the level of disaster vulnerability in the area has not changed significantly. Thus, it is essential to construct more carefully the efforts of physical and non-physical arrangements related to the efforts to overcome the disaster vulnerability. The urgency is that program interventions will need to be carried out that will ensure that the community is safer from the tidal disaster, the community has an institutionalized adaptation attitude, and the community is supported to have a way of getting around (choices) to create economic and social resilience when the tidal disaster comes unavoidably. In addition, supporting the normalization of the carrying capacity of ecosystems and the environment in coastal areas is vital in strengthening climate adaptation and resilience in the six villages.
- 17 One of the limiting factors in the West Lombok Region in disaster management is the small Regional Budget (APBD<sup>3</sup>). In 2020 the West Lombok APBD amounted to IDR1.9 trillion (West Lombok Regional Regulation No. 03/2020 on the Regency's APBD). Support for the Adaptation Fund (AF) project is highly expected to stimulate the tidal disaster management objectives described above. AF project support can finance the provision of adaptation infrastructure, strengthening community capacity, financing for increasing community income, and strengthening community and village institutions.

### Project / Program Components and Financing:

Table 4. Project components and financing

Project Objective	Project Output	Project Outcome(s)	Adaptation Fund Outcome	Grant Amount (USD)
Objective 1. Develop a village-based climate-resilient institutionalization mechanism in the coastal area of West Lombok	Output 1.1. Institutions, policy and planning at the village level that are responsive to climate change disaster impacts	Increased village governance, policy instruments and capacity on climate resilience measures	Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	US\$ 75,205
	Output 1.2 Village community action plan on climate-related disaster risk			US\$ 48,470

<sup>1</sup> Regional Disaster Management Authority = *Badan Penanggulangan Bencana Daerah (BPBD)*

<sup>2</sup> Environment and Forestry Office = *Dinas Lingkungan Hidup dan Kehutanan (DLHK)*

<sup>3</sup> Regional Budget = *Anggaran Pendapatan dan Belanja Daerah (APBD)*

	reduction in coastal areas			
<b>Objective 2.</b> Improved and established adaptive capacity for rural coastal communities to climate-induced hazards	<b>Output 2.1</b> Increased knowledge and skill of the targeted communities, including women and vulnerable groups on climate adaptation actions	Increased rural coastal communities' knowledge and awareness on adaptive measures on climate-induced hazards	Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at the local level	US\$ 42,848
	<b>Output 2.2</b> Models of coastal climate adaptation are developed and demonstrated at the targeted community			US\$ 99,978
<b>Objective 3.</b> Improve the resilience of the coastal ecosystem to strengthen community livelihood resources	<b>Output 3.1.</b> Rehabilitation and enhancement of coastal ecosystems to adapt to climate impacts at selected sites are demonstrated	Increased the carrying capacity of coastal ecosystems to serve as natural defences and livelihood source towards climate impacts	Outcome 5: Increased ecosystem resilience in response to climate change and variability induced stress	US\$ 362,000
				Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas
	<b>Output 3.2.</b> Community income-generating and productive economic activities are increased	Increased sources of income of targeted beneficiaries especially the vulnerable communities in coastal areas		US\$ 262,000
Project / Programme Activities Cost				US\$ 890,501
Project/Programme Execution Cost				US\$ 93,478
Total Project/Programme Cost				US\$ 983,978
Project/Programme Cycle Management Fee charged by the implementing Entity				US\$ 14,760
<b>Amount of Financing Requested</b>				<b>US\$ 998,739</b>

**Projected Calendar:**

<b>Milestones</b>	<b>Expected Dates</b>
Start of Project/Programme Implementation	January 2023
Mid-term Review (if planned)	December 2023
Project/Programme Closing	December 2024
Terminal Evaluation	January 2025

## PART II: PROJECT / PROGRAMME JUSTIFICATION

**A.** Describe the project/program components, mainly focusing on the concrete adaptation activities of the project and how these activities contribute to climate resilience. For the case of a program, show how the combination of individual projects will contribute to the overall increase in resilience.

18 The project has 3 components, namely:

**Component 1. Strengthened governance and institutional capacity.**

This component support the Project objective: Develop village-based climate resilient institution to address climate risks and impacts. This will contribute to Project outcome 1: Increased village governance, policy instruments and capacity on climate resilience measures, that is aligned with Adaptation Fund Outcome No.2. Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses.

19 **Component 2. Capacity building on adaptation measures.**

This component will support the project objective: improve and establish capacity of rural coastal communities to climate-induced hazards. The Project will contribute to Project outcome: increased rural coastal communities' knowledge and awareness on adaptive measures on climate-induced hazards, that is aligned with Adaptation Fund Outcome No.3. Strengthened awareness and ownership of adaptation and climate risk reduction processes at the local level.

20 **Component 3. Coastal ecosystems resilience and sustainable livelihoods**

This component will contribute to the Project objective: improve resilience of coastal ecosystems to strengthen community livelihood. This will contribute to Project outcome 3: increased the carrying capacity of coastal ecosystems to serve as natural defence and livelihood source towards climate impacts and outcome 4: Increased sources of income of targeted beneficiaries especially the vulnerable communities in coastal areas. These Project outcomes are aligned with the following AF outcome: Outcome 5. Increased ecosystem resilience in response to climate change and variability induced stress and Outcome 6. Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas. All components consist of objectives, outputs and activity descriptions as shown in the table 5 below.

Table 5. List of project component, objectives, outputs and activities description

Project Component	Objectives	Outputs	Activities Description
Component 1. Strengthened governance and institutional capacity	<b>Objective 1.</b> Develop a village-based climate-resilient institutionalization mechanism in the coastal area of West Lombok	<b>Output 1.1.</b> Institutions, policy and planning at the village level that are responsive to climate change disaster impacts	<ol style="list-style-type: none"> <li>1. Recruitment of village volunteers for climate-related disaster preparedness. Recruitment of village volunteers minimum of 30 persons for each village (at least 30% of them are women) who are selected by: (i) identification of criteria candidates through informal discussion with village officers, social leaders, and community members; (ii) interview with short-listed candidates; (iii) announcement of selected-volunteers in meeting for the socialization of this project in each village.</li> <li>2. Participatory climate risk analysis (PCRA) by community focused discussion in 3 days for each targeted village to identify and assess aspects related to hazard characteristics, existing capacities, vulnerabilities, risk</li> </ol>

			<p>mapping, as well as risk level assessment for priority hazards. The key participants of PCRA are 35 persons who are representatives of village volunteers, village officers, community leaders, youth leaders, etc. <b>PCRA will be basis to formulate Village Community Action Plan on Climate Resilience as a designed activity in outcome 2.1 below.</b></p> <ol style="list-style-type: none"> <li>3. Establishment of a village climate disaster preparedness work team from village volunteer members and added with other community components. This work team will be justified by the Head Village's decree.</li> <li>4. Training packages for village government and village climate disaster preparedness work team;</li> <li>5. Formulation of local policies on climate resilience (both at village and district levels)</li> <li>6. Facilitation for formulating climate disaster-related guidelines/plans/standards (contingency plan, early warning system);</li> <li>7. Formulation of policy brief/policy paper to strengthen climate resilience actions or policies at sub-national level</li> <li>8. Technical assistance on policy making and governance process at subnational level to support climate adaptation measures at village level (including strengthening knowledge management systems)</li> </ol>
		<p><b>Output 1.2</b> Village community action plan on climate-related disaster risk reduction in coastal areas</p>	<ol style="list-style-type: none"> <li>1. Dissemination of PCRA's results to the wider community through presentation of work team representative in workshop for each village</li> <li>2. Community Action Planning (CAP) on climate resilience through community discussion series and field workshop. Formulation of CAP also consider input and comments in previous workshop regarding PCRA' results (activity 1). CAP on climate resilience is the main activity in output 2.1 that will be implemented through community discussion series and workshop for each village. The key participants of CAP process are village climate disaster preparedness work team, village government, social leaders, and vulnerable groups in each village. <b>Community Action Plan (CAP) on climate resilience also contains implementation of Participatory Coastal Area Spatial Planning integrated with climate-induced disaster resilience</b></li> <li>3. Facilitation on integration Community Action Plan (CAP) with the village government's annual plan and budget through discussion series with village government;</li> <li>4. Facilitation of annual village development planning forum to decide on village development priority programs in the current</li> </ol>

			<p>year including CAP on climate-induced disaster resilience</p> <p>5. Advocacy of CAP to sub-national government policies both at district and provincial levels through lobbying and discussion series by inviting sub-national government representatives both district and provincial levels.</p>
<p><b>Component 2.</b> Capacity building on adaptation measures</p>	<p><b>Objective 2.</b> Improved and established adaptive capacity for rural coastal communities to climate-induced hazards</p>	<p><b>Output 2.1</b> Increased knowledge and skill of the targeted communities, including women and vulnerable groups on climate adaptation actions</p>	<ol style="list-style-type: none"> <li>1. Trainings for targeted community on climate adaptation and resilience. The specific theme of training on climate adaptation and resilience is CRSAL (Climate Resilience Sustainable Agriculture Livelihood) in district level with targeted participants from district government staff, village government, village climate disaster preparedness work team, and NGOs staff by considering gender balance. Participants of this training will be selected as facilitators of the community-based climate field school</li> <li>2. Conducting climate field school on adaptation actions on coastal areas conditions (mangrove, land-based farming in coastal, salt farming), consists of preparation of training modules by the expert team; Training of Facilitators (ToF) for community-based climate field school; in-class for 6 times in each targeted community, and and preparing demonstration plots for climate adaptation (field practices).</li> <li>3. Conducting simulation/exercise to respond to climate induced disaster by testing the contingency plans and early warning system that have been previously prepared (<b>see output 1.1 activity 6</b>) involving approximately 100 people in each village. As part of this activity, standard equipment for village climate disaster preparedness work team will be provided i.e field vest, t-shirt, field cap, boat shoes, handy talkie (HT), preparing evacuation route, preparing for assembly point, and safe evacuation sites.</li> <li>4. Developing and implementing a learning platform and process for communities related to climate adaptation actions through regular learning forums in each village and cross visits to other areas;</li> <li>5. Procurement of climate-induced disaster information and documentation systems: risk map of PCRA; personal computers/laptop for a web/portal development; Sellphone to record and send data; ombrometer to measure rainfall; stationaries; digital cameras.</li> <li>6. Documenting knowledge and best practices of community actions in climate change by producing Stories of Change (SoC) from targeted groups, videos, and book. All of these</li> </ol>

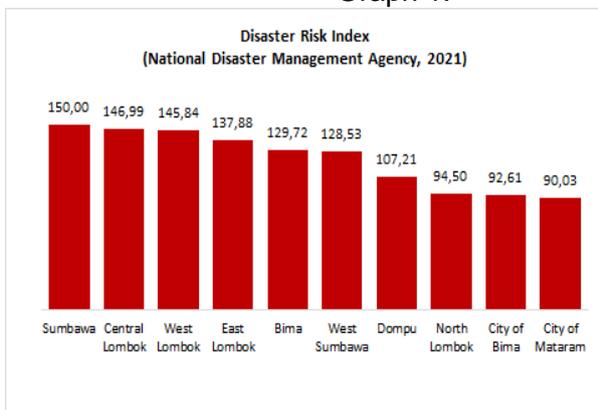
			will be up loaded and disseminated by information system web/portal integrated with the existing village information system.
		<b>Output 2.2</b> Models of coastal climate adaptation are developed and demonstrated at the targeted community	<ol style="list-style-type: none"> <li>1. Conducting analyses and model development on climate adaptation in coastal areas to identify, analyze, and design of model by hiring the expert team with taking into account PCRA's results and CAP.</li> <li>2. Procurement of climate-induced adaptation facilities/equipment: construction of fish pond, fish seed, stationaries (silvofishery in mangrove); crops/plant seed, land for small scale pilot, stationaries (climate-smart land-based farming in the coastal); infrastructures for ecotourism village information center.</li> <li>3. Demonstration of climate adaptation models of coastal climate adaptation at least 3 models i.e silvofishery in the mangrove, climate-smart land-based farming in the coastal, and ecotourism services.</li> <li>4. Documentation best practices and lesson learned from climate adaptation models in coastal area by producing practical guidebook and videos.</li> </ol>
<b>Component 3.</b> Coastal ecosystems resilience and sustainable livelihoods	<b>Objective 3.</b> Improve the resilience of the coastal ecosystem to strengthen community livelihood resources	<b>Output 3.1.</b> Rehabilitation and enhancement of coastal ecosystems to adapt to climate impacts at selected sites are demonstrated	<ol style="list-style-type: none"> <li>1. Participatory coastal area spatial plan integrated with climate-induced disaster resilience. Participatory coastal area spatial plan (PCASP) is the main activity in this output to describe and design patterns or forms of coastal area spatial use in more detail including land use mapping integrated with risk map as produced in the previous PCRA and also Community Action Plan (CAP) on climate-induced disasters. The difference with CAP is that PCAP will prepare on landscape-oriented especially the mangrove management areas rather than the village administration approach as CAP</li> <li>2. Facilitation on development of community-based nurseries for mangrove rehabilitation</li> <li>3. Mangrove planting in 100-hectare areas at selected sites;</li> <li>4. Facilitation in providing infrastructure packages for climate-disaster risk reduction in mangrove areas; infrastructures: rob-resistant embankments and rob-resistant houses;</li> <li>5. Monitoring and evaluation for mangrove rehabilitation</li> </ol>
		<b>Output 3.2.</b> Community income-generating and productive economic activities are increased	<ol style="list-style-type: none"> <li>1. Value chain analyses to develop the potential supply chain for smallholder fisheries and coastal community livelihood by hire expert team</li> <li>2. Identification of business opportunities and product development through study use mixed method (both participatory/qualitative and survey/quantitative technique);</li> </ol>

			<ol style="list-style-type: none"> <li>3. Facilitation of training packages for sustainable smallholder fisheries and livelihood: good practices on fisheries cultivation; diversification of products/processing; marketing.</li> <li>4. Facilitation small-scale business licensing and product certification</li> <li>5. Procurement of equipment for productive economies and businesses i.e production machines, packaging machines, etc;</li> <li>6. Technical assistance for developing market-demand commodities and products</li> <li>7. Facilitation on access to finance (including venture capital) to support communities' businesses by developing network or collaboration with banks or private sectors.</li> </ol>
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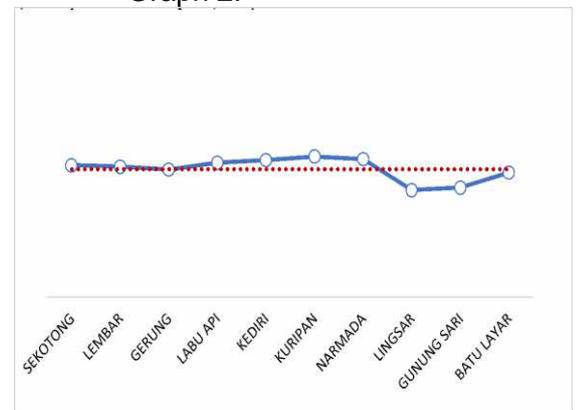
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Village-based local climate resilience institutionalization adopts the mechanism of the Disaster Resilient Villages (Destana<sup>4</sup>) development as enacted in the Regulation of the Head of the National Disaster Management Authority (BNPB) No. 1/2020 with an emphasis on climate-induced disasters. The idea of Climate Disaster Resilient Villages (CDRV) directs to increase the community and government village's capacity to independently adapt and deal with climate-induced disaster threats and recover quickly from the adverse effects if a climate-induced disaster strikes them. The determination of districts as the project site is based on the Disaster Risk Index (BNPB, 2021). West Lombok was the third regency with the highest-risk index in West Nusa Tenggara Province (see graph 1). Furthermore, the identification of Lembar and Sekotong as targeted districts was based on the Vulnerability and Sensitivity Index (VSI) as published in the Vulnerability Index Data Information System by the Ministry of Environment and Forestry (2018). The VSIs of the two districts were higher than the average VSI of the districts in West Lombok (see graph 2).

Graph 1.



Graph 2.



Source: Analyzed from DRI (BNPB, 2021) and SVI (2018)

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The selection of six project location villages at the village level is purposive, considering these villages are included in coastal areas constantly hit by tidal waves due to extreme weather and increased sea waves. Village-based resilience is 'a condition' or 'order in which the community and its government can identify threats-related climate change impacts in their area and organize local resources to reduce vulnerability while increasing capacity to mitigate their climate-related risks. These capabilities will be implemented in village development planning and budgeting, which includes prevention, preparedness, disaster risk reduction, and capacity-building efforts for post-emergency recovery. The leading actor in initiating and implementing this CDRV is the village community, both men and women, by affirming vulnerable and marginalized groups at every

activity.

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The sustainable livelihoods (SL) approach is a framework of this proposed project to ensure the achievement of climate resilience by considering the potential and diversity of local community livelihood sources in the coastal areas of West Lombok. Refers to the SL approach, it can be described that individuals, households, or communities usually rely on various livelihood sources that are owned and can be accessed and controlled to sustain their life. These livelihood resources are constructed into five assets: human, natural/environment, physical/ infrastructures, socio-cultural, and economical. Ownership, access, and control over livelihood resources are unequally distributed and often modified by social roles and social relation patterns (such as gender, economic class, age, ethnicity, religion, and social position). All livelihood resources have the potential to be lost and damaged if affected by a disaster or climate crisis. The ability of individuals, families, or communities to maintain their existence will be disrupted if one or more livelihood assets are lost or damaged, especially for vulnerable or marginalized groups. Coastal communities live in prone areas and are affected by climate variability or extreme weather. Most of them relied on household incomes from unadaptable livelihood sources due to their high vulnerability to the negative impacts of climate change. Therefore, one of the main components of this proposed project is to improve coastal community livelihood resources in West Lombok to be more adaptive and resilient under climate change stresses by assessing community risks, vulnerabilities, and capacities using a sustainable livelihood approach.

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Improving the quality of coastal ecosystems is one of the key elements to taking account in the development of village-based climate resilience institutionalization mechanisms regarding to its existence as a landscape (natural resources) and community's life scape (socioeconomic-related aspects). This argument is based on the objective fact that damaged coastal ecosystems due to various pressures, both natural-factors and man-made, will further exacerbate to vulnerability situation of the environment and humans to tidal flooding threats when sea level rise occurs. The measures to improve ecosystem quality will begun with the formulation of coastal areas' spatial plans through consultation and discussion with the community which will be integrated with deliverable results of previous climate risk analysis (including vulnerability and capacity assessment) under tidal flooding hazard. This participatory coastal area spatial plan includes agreements and determination of protection and cultivation zones. Within this component, the project will also facilitate demonstration activities on coastal restoration and rehabilitation through mangrove planting as an effort for reducing vulnerability to tidal threats while rehabilitating the mangrove ecosystems that function as potential sources for livelihood activities so the community become more adaptive and resilient to climate change impacts. In addition, mangrove restoration and rehabilitation is an innovative approach for community livelihood strategy that can be implemented under local agro-ecological

- B.** Describe how the project/program provides economic, social, and environmental benefits, particularly to the most vulnerable communities and vulnerable groups within communities, including gender considerations. In addition, describe how the project/program will avoid or mitigate adverse impacts in compliance with the Adaptation Fund's Environmental and Social Policy and Gender Policy.

### **Economic, Social, and Environmental Benefits.**

#### **1. Economic and Social Benefits**

25. Economically, this project directly impacts the livelihoods of coastal communities through a 10% increase in household revenues from income sources that are more diverse, adaptive, and resilient to climate change stressors based on optimizing local coastal potential. The range of fishers' income is IDR7-14 million per year (small fishers) and IDR12-18 million per year (middle fishers). The total targeted beneficiaries of the project are **2,379 persons (1,665 men and 714 women)**, distributed in **six selected villages** in Sekotong and Lembar district. The districts are included in the vulnerable coastal areas to adverse impacts of climate change as shown in the following table:

Table 6. Targeted beneficiaries of the project

District	Village	Population			Targeted Beneficiaries (5% of total)	Distribution of targeted beneficiaries	
		Men	Women	Total		Man	Women
Sekotong	1. West Sekotong	5,135	4,864	9,999	500	350	150
	2. Central Sekotong	4,226	4,191	8,417	421	295	126
	3. Cendi Manik	2,889	2,843	5,732	287	201	86
Lembar	4. Lembar	2,647	2,678	5,325	266	186	80
	5. Labuan Tereng	3,200	3,135	6,335	317	222	95
	6. South Lembar	5,960	5,802	11,762	588	412	176
<b>TOTAL</b>		<b>24,057</b>	<b>23,513</b>	<b>47,570</b>	<b>2,379</b>	<b>1,665</b>	<b>714</b>

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The social benefit of this project is improving local governance on climate-induced disaster risk management in coastal areas by ensuring social participation of representatives of all community groups without exception to engage and voice out their aspirations, advice, suggestions, and expectations regarding climate adaptation and resilience actions align with climate justice principles.

## 2. Environmental Benefits

- 27 This project will improve the environment around the areas affected by tidal floods, both in natural and artificial environments and enable the development of environmentally friendly products. The project will improve the natural environment by rehabilitating and planting mangroves in coastal areas covering 100 hectares to build environmental resilience in resisting tidal waves and flood currents. Another ecological improvement is the availability of support in constructing infrastructures or facilities for sanitation improvement and clean water for the surrounding community. The other benefit of environmental restoration is to develop more various processed products by prioritizing fewer chemicals or organic products. In addition, mangrove rehabilitation also provides opportunities for village government to develop coastal ecotourism areas resilient to climate-induced disasters.

## 3. Gender and Vulnerable Groups Benefits

- 28 In the context of gender and social inclusion (GESI), the expected benefit of this project is to increase community involvement, both men and women, especially vulnerable and marginalized groups (including a person with disabilities), in discussing and planning actions related to climate resilience and adaptation. In addition, the project will implement gender and social inclusion mainstreaming by providing 'space' for poor people, both men, and women, as well as other vulnerable groups as right holders to claim their rights in access to climate information for decision making in their livelihood activities. This project requires the involvement of at least 30% of women's representatives in every activity.

### C. Describe or provide an analysis of the cost-effectiveness of the proposed project/program.

- 29 The Rob Flood caused losses to the community in 6 villages in Sekotong and Lembar Districts. Based on the results of the analysis, the amount of losses caused by the rob is IDR 5,067 billion/year. These losses include a. losses due to crop failure with an area of 292 ha and livestock

of IDR 2,5 billion, b. loss to public health of US\$ 37,500 (350 families) c. loss of community settlement buildings of US\$ 45,000 (350 families affected by rob). d. loss of opportunity to do business for fishermen amounting US\$.31.250 (350 fishermen). e. loss of business opportunities in the tourism sector of US\$ 69.643 (325 tourism business actors).

- 30 From the results of the cost-effectiveness analysis, the amount of losses and financial support from the adaptation fund can be said to be effective in reducing the impact of the tidal disaster on people's livelihoods. Funding of US\$ 998,738 cannot directly overcome the rob problem. The project is estimated to reduce losses by 50% in the second year. Losses can be minimized by up to 90% in the tenth year. Thus if you calculate the loss for 10 years, the total loss is IDR 50 billion. If the project investment is IDR.14 billion through adaptation fund support, it can be said that the project is feasible. If there is support from other parties, reducing the impact of the rob can be achieved more quickly.

	<b>Polder System Technology</b>	<b>Proposed Project</b>
<b>Cost</b>	<b>US\$ 6.428.571</b>	<b>US\$ 998.739</b>
Protection Benefits	Relatively faster to use when building construction has been completed	Relatively slow, mangrove growth as a wave barrier follows the habitat. The construction of retaining embankments is relatively easy and quick to do
Material	Using industrial / factory production materials	Using local material
Carbon Efficiency	High emissions from material transportation as well as water pumping machine operation	Low emissions can even absorb emissions
Support provision of ecosystem services	Almost no ecosystem service support. This technology is predicted to change the ecosystem characteristics of canal construction	It fits perfectly with the characteristics of the ecosystem
Socio-cultural continuity	community is minimal because the construction is carried out by workers who are brought in from outside the area. It has the potential to damage local socio-cultural values	Can increase community participation through mutual cooperation and community self-help as well as awareness to protect the environment
Economic retention	Wasteful because the operating and maintenance costs are relatively expensive	Low operating costs, all local raw materials available

- 31 This project is very beneficial for the ecological, social and economic resilience of the community in the project location. The project cost of US\$ 998,739 is considered very effective compared to implementing other approaches such as the polder system technology. Analysis of the amount of benefits to be obtained for beneficiaries is US\$ 419.8/person or US\$ 166,456/village. On the other hand, this project also provides multiplier effects, including preserving coastal ecosystems, increasing public knowledge, maintaining regional food security, increasing employment opportunities and developing tourist areas.
- 32 Potential sources of funding support to finance project activities and project sustainability can come from village funds of US\$ 21.429, community self-help US\$ 42.857, support from the Regional Budget through several technical OPDs including the Public Works Service, the Tourism Office, the Regional Disaster Management Agency amounting IDR 2 billion (US\$ 142.857). Other potential support from the private sector includes hotels, homestays and Indonesian shipping companies (PELINDO) in the amount of IDR 1 billion (US\$ 71.429).

**D. Describe how the project/program is consistent with national or sub-national sustainable development strategies, including, where appropriate, the National Adaptation Plan (NAP), national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.**

- 33 Nationally Determined Contributions (NDC) of Indonesia: This proposed project will contribute to Indonesia's commitment on climate adaptation by enhancing climate resilience of coastal areas and small islands West Nusa Tenggara, particularly in Lombok Island. In the national context, this project will contribute to the GHG emission reduction target of 26% and up to 41% with international support. This project objective supports the Nawacita Mission towards a low-carbon and climate-resilient development direction, with climate change adaptation and mitigation as an integrated and cross-sectoral priority in the national mid-term development plan. The proposed project will do so by applying these strategies: (1) developing village-based local climate resilience institutionalization mechanisms in the coastal area of West Lombok, 2) Improving community livelihoods that are resilient and adaptive to climate change, 3) Increasing the carrying capacity of ecosystems.
- 34 Indonesia's National Climate Adaptation Plan (RAN API). The project will support Indonesia's National Adaptation Plan (RAN-API) prepared by BAPPENAS in 2021, especially in Marine and Coastal Priority Sector in terms of: i) Infrastructure: by combining Community-based Adaptation (CbA) approaches; and Capacity building: by providing alternative livelihood for small-scale fishermen during extreme weather. It will also refer to The Ministry of Environment and Forestry Regulation No. P.33, 2016 about Guidelines on Climate Adaptation Action. This project will provide inputs for the Climate Adaptation Plan.
- 35 Indonesia's Adaptation Communication. The Project will contribute in strengthening and demonstrating the eight pillars of NDC Roadmap Adaptation strategies particularly on strengthening policy instruments for climate change adaptation and disaster risks reduction in coastal areas, integrating climate adaptation into development planning and financial mechanisms at village and subnational level, strengthening local capacity by best practices in coastal climate adaptation and application of adaptive technology for climate impacts in coastal areas.
- 36 In the sub-national context, this project will contribute to strengthen the following sustainable development policy and strategy:
1. Gubernatorial Regulation No. 54/2019 regarding Climate Change Adaptation (API<sup>5</sup>) Regional Action Plans (RAD<sup>6</sup>),
  2. Gubernatorial Regulation No. 51/2012 regarding regional action plans to reduce greenhouse gasses (GRK<sup>7</sup>),
  3. Regional regulation No. 12/2017 regarding zoning plans for coastal areas and small islands in NTB, Concerning poverty reduction strategies, the implementation of this project supports efforts to improve community livelihoods that are resilient and adaptive to climate change in coastal areas so that this is very much following the NTB Gubernatorial Regulation No. 29/21 concerning poverty alleviation

**E. Describe how the project/program meets relevant national technical standards, where applicable, such as standards for environmental assessment and building codes, and complies with the Environmental and Social Policy of the Adaptation Fund.**

- 37 Relevant national policies/regulations to this project, as well as the compliance to AF Environmental and Social Policy are described in below:

<sup>5</sup> Climate Change Adaptation = *Adaptasi Perubahan Iklim (API)*

<sup>6</sup> Regional Action Plans = *Rencana Aksi Daerah (RAD)*

<sup>7</sup> Greenhouse gasses = *Gas Rumah Kaca (GRK)*

Table 7. Relevant national policies as well as the compliance to AF ESP

Output	AF ESP	Relevant Rules, Regulation, Standards and procedures	Compliance procedure and authorizing offices
1.1.	1,8,9,10,11,14	<ul style="list-style-type: none"> <li>• Law No. 6 of 2014 on Village</li> <li>• Minister of Home Affairs Regulation No 20 of 2018 concerning village financial management</li> <li>• Village Regulation, Development of Disadvantaged Regions and Transmigration No. 6 of 2021 concerning the Village Income and Expenditure Budget</li> <li>• Regulation of the Minister of Villages, Development of Disadvantaged Regions and Transmigration No.6 of 2022 concerning Village Community Institutions</li> <li>• NTB Provincial Regulation No. 2 of 2008 regarding the management of coastal areas and small islands and the NTB Provincial Regulation No. 9 of 2014 regarding disaster management as stated in the 2019-2023 Regional Action Plan (RAD API)</li> <li>• Regent Regulation No. 2 of 2021 concerning Village Authority.</li> <li>• Regent Regulation No. 49 of 2021 concerning Priority for Use of Village Funds.</li> </ul>	Ministry of Home Affairs, Ministry of Villages and Disadvantaged Regions, NTB Provincial Government, West Lombok Regency Government
1.2.	1,3,4,8,9,10,11,14	<ul style="list-style-type: none"> <li>• Law No.24 of 2007 concerning Disaster Management</li> <li>• Law No. 6 of 2014 on Village</li> <li>• Government Regulation No. 27 of 2021 concerning the Implementation of the Maritime and Fisheries Sector</li> <li>• Government Regulation No 22 of 2021 on the Implementation of Environmental Protection and Management</li> <li>• Ministry of Home Affairs Regulation No 114 of 2014 on Guidance for Village Development</li> <li>• Regional Regulation No.9 of 2014 concerning Regional Action Plans for Disaster Risk Reduction</li> <li>• BNPB Head Regulation No. 1 of 2012 concerning General Guidelines for Disaster Resilient Villages</li> <li>• Regulation of the Head of BNPB No.2 of 2012 concerning General Guidelines for Disaster Risk Assessment</li> <li>• BNPB Regulation No.5 of 2017 concerning the Preparation of Post-Disaster Rehabilitation and</li> </ul>	Ministry of Villages and Disadvantaged Regions, Ministry of Environment and Forestry, Ministry of Maritime Affairs and Fisheries, Ministry of Home Affairs, National Disaster Management Agency (BNPB), Provincial Government of West Nusa Tenggara, West Lombok District Government

		<p>Reconstruction Plans.</p> <ul style="list-style-type: none"> <li>• BNPB Strategic Plan for West Lombok Regency Government for 2019-2024.</li> </ul>	
2.1.	2,3,4,8,9,10 11,12,14	<ul style="list-style-type: none"> <li>▪ Law no. 27/2007 concerning the management of coastal areas and small islands</li> <li>▪ Government Regulation No. 27 of 2021 concerning the Implementation of the Maritime and Fisheries Sector</li> <li>▪ Minister of Environment and Forestry Regulation No. 33 of 2016 concerning guidelines for preparing climate change adaptation actions as well as contained in the RAN API and NDC-APIK roadmap.</li> </ul>	Ministry of Maritime Affairs and Fisheries, Provincial Government of NTB
2.2.	8,9,10,11,14	<ul style="list-style-type: none"> <li>▪ Law No 26 of 2007 on Spatial Planning</li> <li>▪ Government Regulation No. 27 of 2021 concerning the Implementation of the Maritime and Fisheries Sector</li> <li>▪ The Decree of the Governor of NTB No 561-685 of 2021 regarding the regional minimum wage standards for the province of NTB.</li> </ul>	Ministry of Maritime Affairs and Fisheries, National Planning and Development Agency, NTB Provincial Government, West Lombok district government.
3.1.	2,3,4,5	<ul style="list-style-type: none"> <li>▪ Law no. 27/2007 concerning the management of coastal areas and small islands</li> <li>▪ Government Regulation No. 27 of 2021 concerning the Implementation of the Maritime and Fisheries Sector</li> <li>▪ Regulation of the Minister of Maritime Affairs and Fisheries No.3 of 2019 regarding community participation in implementing the protection and empowerment of fishermen, fish cultivators and salt farmers</li> </ul>	Ministry of Maritime Affairs and Fisheries, Office of Maritime Affairs and Fisheries of NTB Province
3.2.	2,4,11	<ul style="list-style-type: none"> <li>▪ Government regulation No.7 of 2021 concerning facilitation, protection and empowerment of cooperatives, and micro, small and medium enterprises</li> <li>▪ Technical guidelines Government incentive assistance to increase business/production capacity of tourism business actors and productive economy No.HK.01./2/Juknis/DII/2020 Ministry of Tourism and Creative Economy</li> </ul>	Ministry of Small and Medium Enterprises (UMKM), Ministry of Manpower, NTB Provincial Government
3.3.	1,2,3,4,5,8,9, 10,11,12,14	<ul style="list-style-type: none"> <li>▪ Law no. 27/2007 concerning the management of coastal areas and small islands</li> <li>▪ Law no. 32 of 2009 concerning environmental protection and management</li> <li>▪ Law no. 13/2003 concerning manpower</li> </ul>	Ministry of Fisheries and Maritime Affairs, Ministry of Environment and Forestry, Ministry of Manpower, NTB Provincial Government

		<ul style="list-style-type: none"> <li>▪ Government Regulation No. 27 of 2021 concerning the Implementation of the Maritime and Fisheries Sector</li> <li>▪ Ministry of Marine and Fisheries Decree No 24 of 2016 on the Procedures for Coastal Areas and Small Islands Rehabilitation</li> <li>▪ Minister of Environment and Forestry Regulation No. 33 of 2016 concerning guidelines for preparing climate change adaptation actions as well as contained in the RAN API and NDC-APIK roadmap.</li> </ul>	
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**F. Describe if there is duplication of the project/program with other funding sources.**

- 38 Coastal community development initiatives in Lembar and Sekotong Subdistricts have been implemented since 2012. Support for policy advocacy for the management of coastal areas and small islands through the preparation of draft regional regulations has been supported in the 2012 IMACS Project supported by IFAD in 2013-2017. Several strategic programs from the central government have also been implemented, including disaster-resilient villages and climate village programs. However, the project implemented did not entirely cover the 6 villages as proposed in this proposal.
- 39 Based on that, the proposed proposal can be declared as not overlapping with the previous projects because the proposed project focuses more on 1) on adaptation and resilience of village-based coastal areas, 2) increasing community participation to reduce the impact of tidal disasters, 3) creating other sources of livelihood for the community and 4) increasing the carrying capacity of the ecosystem to reduce the impact of the tidal disaster.
- 40 There are several interesting lessons from the initiatives that have been carried out by previous projects, namely 1) the Regional Regulation on the management of coastal areas and small islands (PWP3K) in West Lombok Regency provides guidelines as a direction for the management of coastal areas, 2) Starting to grow awareness and knowledge of the community regarding the importance of coastal ecosystems, 3) the emergence of community leaders who have a concern for the preservation of coastal ecosystems.

Table 8. Project initiatives that have been implemented in 6 villages in Lembar and Sekotong sub-districts

No	Project	Goal	Year	Funding Sources	Potential synergies & collaboration
1	Indonesian Marine and climate Support Project (IMACS)	Facilitation of Draft Regional Regulations (Raperda) regarding the management of coastal areas and small islands (PWP3K) in West Lombok Regency	2012	IMACS dan Gadjah Mada University	The project will leverage the information of climate change information in coastal areas and updated through Project intervention. The Project will also advocate for policy uptake on coastal areas management using the draft regulation and studies facilitated by IMACS
2	Coastal community empowerment project coastal Community	Empowerment of coastal communities through improving the economy of	2013-2017	CCDP -IFAD, Bappenas dan Marine and Fisheries Ministry	The Project will cascade and upscale the intervention to other villages from the activities carried out in CCDP sites

	Development Project (CCDP)	the community in South Lembar Village			
3	Ecotourism Development in Eat Mayang Area, Lembar District	Protection mangrove ecosystem and guiding mangrove cultivation independently	2013	Marine and Fisheries Ministry	The Project will cascade and upscale demonstration activities on ecotourism to other villages from the activities carried out in Ministry project sites
4	Disaster-resilient tourism village development	Provision of infrastructure and community empowerment in the village of South Lembar, Sekotong Tengah, Labuhan Tereng, Cendi Manik, Lembar, West Sekotong	2013	BPBD NTB dan Palang Merah Indonesia (PMI)	The project will update the baseline information and cascade intervention to develop disaster resilient tourism villages in other villages (other than covered in BPBD programme)
5	Climate Village program	Increase public understanding of climate change and its impacts so that all parties are encouraged to take concrete actions that can strengthen resilience to climate change and contribute significantly to GHG reduction in South Lembar Village, Sekotong Tengah, Labuhan Tereng, Cendi Manik, Lembar	2021	KLHK	The Project will leverage the awareness and knowledge produced from Proklim to be used on the key Project intervention that aim to strengthen and enhance awareness (Output 2.1)

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

- 41 The successful implementation of this project will provide a series of lessons learned and knowledge management of the Project. The knowledge management plan of this Project is described in the following table.

Table 9. Knowledge management plan

Project Output	Targeted Audience	Knowledge Products	Means of Dissemination	Means of Access
1.1.	Government, community groups, Vulnerable groups (women and youth),	Document of Participatory climate risk analysis (PCRA)	Workshop, video	Consortium's and government website and social media, national and

	Private sector, CSOs			local media
		Module of Training packages for village government and village climate disaster preparedness work team	Training, Video	Consortium's and government website and social media, national and local media
	Government, community groups, Vulnerable groups (women and youth), Private sector	Document local polices	Workshop and Expert team meeting, Video	Consortium's and government website and social media, national and local media
	Government of West Nusa Tenggara dan District of West Lombok, Community groups, vulnerable groups (women groups and youth)	Document of guidelines/plans/standards (contingency plan, early warning system)	Workshop and Expert team meeting,	Consortium's and government website and social media, national and local media
	Village government, Community groups, Vulnerable groups	Policy brief/policy paper	Workshop and Expert team meeting	Consortium's and government website and social media, national and local media
2.2.	Government of West Nusa Tenggara dan District of West Lombok, Community groups, vulnerable groups (women groups and youth)	Video, Printing Document best practices and lesson learned from demonstration of climate adaptation models	Delivery to stakeholders	<a href="http://www.transform.or.id">www.transform.or.id</a> <a href="http://www.konsepsi.org">www.konsepsi.org</a> <a href="http://www.kemitraan.or.id">www.kemitraan.or.id</a> <a href="http://www.data.ntbprov.go.id">www.data.ntbprov.go.id</a> <a href="http://www.satudata.lombokbarat.go.id">www.satudata.lombokbarat.go.id</a>
3.1.	Local government, village government, fishermen groups, vulnerable groups (women and youth)	Document and Video Coastal area plan integration	Workshop and training, delivery networking, Media mainstreaming and media social	Consortium's and government website and social media, national and local media
3.2.	Private sectors, Government, Community groups, Fishermen groups, BUMDes, SMEs	Value chain analyses report,	Workshops, Journalist Trip	Consortium's and government website and social media, national and local media

3.3.	Private sectors, Government, Community, Fishermen groups, BUMDes, SMEs	Business case models, BMP publication, local champion stories or videos	Workshop, Journalist Trip, Exhibition, B2B Meetings	Consortium's and government website and social media, national and local media
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- 42 To ensure synergy and sustainability of the knowledge transfer and management, the Project will also align the Project knowledge materials and dissemination with knowledge management centers owned by the West Nusa Tenggara Provincial government, namely; One NTB Data and West Lombok District Government, namely; SIWARTA, and NTB Siaya from BPBD NTB Province

**H. Describe the consultative process, including the list of stakeholders, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Adaptation Fund's Environmental and Social Policy and Gender Policy.**

- 43 This project has consulted with relevant stakeholders in relevant with the policy/decisions related to issues (tidal flood and climate change adaptation) starting from the community level up to the regency and province level. Some of these party include:
- Provincial governments (regional planning agencies, environment and forestry offices, BPBD, industrial offices, trade offices, village governments, BPOM, social offices) play a role in sharing budgets and policies by mainstreaming climate change adaptation.
  - The consultation with West Lombok Regency BAPPEDA Office was conducted on Tuesday 27 December 2022 and attended by 19 people (14 men and 5 women) from elements including West Lombok BAPPEDA, BPBD NTB, Provincial PU PR, DLHK, BMKG, NGOs, Lembar Sub-District Head, Village Government, Fishermen's Groups and Environmental Youth Leaders. This FGD activity aims to deepen information related to various events, periods of occurrence, social and environmental impacts, as well as adaptation and mitigation programs from existing rob disasters. The result from the consultation reiterates the need of synergy and collaboration of all stakeholders in developing a careful planning and intervention to address the robs problems and adapting to the future risks of climate hazards. Documentation of this consultation is provided in the Annex.
  - Focus Group Discussion (FGD) was conducted with stakeholders at the village level, on September 2, 2022. The FGD was attended by as many as 10 people. Those who attended were the head of sub-village, the head of South Lembar Village, the Fishermen's Group, Salt Farmers, Mangrove nursery farmers, wetland farmers and housewives. Of the 10 people who attended, 5 people (50%) were women.

**Mainstreaming gender in project**

- 44 Considering the importance of women's roles in various aspects, especially in development issues, this project will use a gender perspective from planning to program implementation. The aim is to mainstream gender, especially in the management of coastal areas. By applying the principle of gender inclusivity, this project sees the role of women as crucial and potential parties to maintain the sustainability of coastal areas through pilot and productive businesses.
- 45 Women are the most vulnerable social group and are affected by *rob*. When the disaster occurred, women's activities (productive sector including salt making, activities in the fields, making processed food from marine products, mangrove nurseries, buying and selling fish catches, and small traders at tourist village locations) were affected and even stopped being productive. Women tend to do domestic work; while men are more involved in securing the environment and their homes as *the rob* occurs.
- 46 In addition, there is a high gap between women's and men's roles in managing coastal areas prone to tidal floods, according to previous research. The increased gap occurs in two

aspects: institutional governance and governance of the coastal regions and the environment. However, women have a prominent role in business governance. Accordingly, this project will try to provide enabling environment and opportunities that women can be involved in both aspects. In the institutional aspect, women must be involved proportionally in meetings, discussions, and capacity-building activities. In regional governance, on the other hand, women are given opportunities in various aspects of the project.

**I. Provide justification for funding requested, focusing on the total cost of adaptation reasoning**

- 47 Climate change adaptation aims to increase resilience by reducing vulnerability and increasing the capacity of communities and areas where they live, exposed to disasters. Thus, if hazards and vulnerabilities are reduced, and the power of the community and region is increased, the community's resilience in facing tidal disasters caused by climate change will be better/increased. Thus, it will minimize the communities' risk of loss of life, economy, society, and environment experienced caused by tidal flood disasters.
- 48 The development of climate resilience programs in West Lombok regency has been implemented in five villages, including Mareje, Cendi Manik, Banyu Urip, East Sekotong, and South Kuripan. The five villages have received a charter for their participation in developing the Climate Village Program with an Intermediate Category by the Ministry of Environment and Forestry in 2021. However, the West Lombok Government's policy to integrate climate change management is still weak, as reflected in their 2019-2024 RPJMD. Goals for achieving the fifth mission: Increasing Environmental Quality and Reducing Regional Disaster Risk with the Environmental Quality Index and Regional Disaster Risk Index as a measure of success with targets of 58.57 for IKLH and 123.58 for IRBD at the end of the RPJMD period. There are only two programs related to low carbon development and increasing climate resilience: The Waste Management Performance Development Program and the Pollution Control Improvement Program.
- 49 This project is proposed to reduce the risk of vulnerability and increase the resilience of communities and the environment exposed to tidal disasters. This hope/goal will be achieved if the capacity of the community is increased. This is in the form of knowledge and skills of vulnerable groups, the ability to manage livelihood resources, and support from the institutional and policy needed for this purpose. In handling the tidal disaster in Lembar district and Sekotong district, the West Lombok government has included the handling of the tidal disaster in the 2019-2024 RPJMD. However, this effort has not been carried out because 1) the allocation of funds that should have been used for handling tidal flood disasters was diverted to overcome the COVID-19 pandemic, 2) the allocation of funds is relatively small, so it is not able to handle tidal disasters, 3) village funds are only able to handle small-scale development, 4) tidal flood's impact is felt almost every year, so urgent action is needed. For this reason, Adaptation Fund is needed to stimulate efforts for tidal flood disasters response.
- 50 If the community and the area in this project location do not have support from the Adaptation Fund, then the community in six villages (Lembar district and Sekotong district) will always be continuously exposed to tidal flood disasters because of climate change. In addition, environmental damage will get worse if this condition continues. Therefore, the existence of policy advocacy activities for stakeholders, especially the village, district, and provincial government, will ensure the sustainability of this program. This is especially in sustainable management of coastal areas and communities, in managing community livelihoods and the coastal regions for climate change adaptation.

Table 10. Scenarios and justifications for why this project intervention is vital to be proposed

<b>Component</b>	<b>Without the Adaptation Fund</b>	<b>With the Adaptation Fund</b>
Output 1.1 Institutions, policy and planning at the village level that are responsive to climate change disaster impacts	The institutional resilience at the village level in dealing with the tidal disaster is still limited due to its low capacity and limited support for facilities and infrastructure.	Losses due to climate change disasters from the aspect of resilience will increase. Meanwhile, the element of vulnerability will decrease because the capacity has been increased.
Output 1.2. Increased community participation in reducing tidal flood disasters	Community participation in mitigating and adapting to overcome disasters is small due to low awareness.	The number of people contributing to climate change adaptation activities will increase because they have received the support of knowledge and skills in dealing with climate change.
Output 2.1. Increased community preparedness in the face of tidal disasters	The community's preparedness in dealing with disasters is lacking because the facilities and infrastructure to anticipate this happening do not yet exist.	The community will always be ready to face the tidal disaster because they have acquired the knowledge, skills, and infrastructure to deal with the tidal floods in the village.
Output 3.1. Established business management capacity and opportunity for viable community livelihood and smallholder businesses	Opportunities to obtain sources of livelihood are limited due to lack of knowledge and skills in creating job opportunities. Therefore, the number of people who will become jobless will increase.	Opportunities to develop and create sources of livelihood will be opened so that the community's income level when a disaster occurs will be stable.
Output 3.2. Increased community income generating and productive economic activities	Community income during the tidal flood disaster decreased due to the cessation of work activities. Unfortunately, the number of people who will experience this decline in income will continue to increase.	Opportunities to develop and create sources of livelihood will be opened so that the community's income level when a disaster occurs will be stable.

**J. Describe how the sustainability of the project/program outcomes has been considered when designing the project/program.**

- 51 The sustainability of project/program outcomes has been considered when designing the project. The project's sustainability is developed from the perspective of policies, institutions, and financing at the village and regency levels.
- 52 At the village level, a multi-stakeholder forum will be formed to discuss and develop community action plans to reduce vulnerability to climate change. In addition, a village alert team will also be constructed or utilized, one of whose duties is emergency response to disasters. The establishment of these institutions is based on village regulations and legalized by the village head. Meanwhile, to ensure sustainable financing, the agreed community action plan to reduce vulnerability to climate change will be integrated into the village medium-term development plan (RPJMDesa) and/or village working plan (RPKPDesa) documents.
- 53 At the regency level, the regional action plan document for climate change adaptation (RAD-API) of West Lombok regency will be prepared, and legalized through a Regent Regulation. Furthermore, the village climate change adaptation plan that has been integrated into the village planning document is sought to be accommodated in West Lombok's RAD-API document. In addition, the West Lombok Climate Change Working Group (Pokja Perubahan Iklim) will also be formed, tasked to ensure the implementation of climate change adaptation programs and conduct evaluation monitoring.
- 54 NTB's risk index score decreased from 172.00 (HIGH) in 2013 to 128.05 (MEDIUM) in 2020 and 122.33 (MEDIUM) in 2021. In the last six years the regency/city's disaster risk index scores generally decrease. The IRBI 2021 data states that there are three regencies that are still "HIGH" risk, namely: Sumbawa, Central Lombok, and West Lombok. The risk index value that does not change is due to the constant capacity value as described above.
- 55 Along with the above, the progress of disaster-resilient village development is quite significant, including the villages in West Lombok regency. Disaster-resilient villages are mostly from districts in West Lombok. Most of them are financed from the APBD, while others are supported by Non-Governmental Organizations (NGOs).
- 56 In general, the distribution of disaster-resilient villages/sub-districts in West Nusa Tenggara is spread over Mataram city, covering three districts consisting of eight sub-districts, West Lombok regency includes eleven districts comprised of 50 villages/sub-districts, Central Lombok regency contains ten districts consisting of 34 villages/sub-districts, East Lombok regency includes 12 districts comprised of 31 villages/sub-districts, North Lombok regency covering five districts consisting of 22 villages/sub-districts, West Sumbawa regency covering three districts composed of five villages/sub-districts, Sumbawa regency includes four districts consisting of eight villages, Dompu regency includes seven districts comprised of 18 villages/sub-districts, Bima regency has eleven districts consists of 36 villages/sub-districts, Bima city includes five Sub districts and 12 villages/sub-districts.

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

- 57 From the results of risk identification based on the output project, there are several risks that fall into the moderate category and need to get serious attention in this project, including risks to beneficiaries who do not have access to capital, loss of community livelihoods and injustice in obtaining social assistance when the Rob disaster, the risk of very slow growth of mangrove planting, and the risk of soil pollution due to the use of plastics. In minimizing these risks, the project has identified mitigation actions including project activities that need to connect

beneficiaries with the bank as well as facilitation of licensing and product marketing so that it is hoped that beneficiaries can run their businesses to increase income, conduct an inventory of directly affected communities as a basis for targeting the provision of assistance from government and other parties, using certified mangrove seeds and assisting the community in carrying out maintenance and monitoring evaluations, Limiting the use of plastic in project activities.

- 58 The risks that have a low level identified include the risk of non-compliance in infrastructure development with standard civil technical requirements which must refer to Law No. 18 of 1999, the risk that local people do not get access to work, the risk of domination of certain mangrove species over other species, the existence of the risk of releasing greenhouse gases originating from vehicles transporting project materials, there is a risk that vulnerable groups in society (disabilities, women, the elderly) are not given the opportunity by their families and relatives to be involved in project activities. Mitigation efforts that need to be carried out have been identified to minimize the risk of this happening. The results of risk identification, levels and mitigation actions based on ESP Adaptation Fund are more clearly presented in the following table:

Table 11. Environment and social impacts and risks

<b>Significance of the Risk</b>				
<b>ESP Adaptation Fund</b>	<b>Risks Identified per E&amp;S Principles</b>	<b>Impact and Probability (1-5)</b>	<b>Significance Low, Moderate, High</b>	<b>Mitigation</b>
1. Compliance with law	There is a risk of non-compliance in infrastructure development ( This is referred to in output 2.2) with the standard civil technical requirements as stipulated in the policy of Law No. 18 of 1999 concerning construction services.	3/1	Low	Develop clear cooperation rules in the implementation of construction projects, prepare Detailed Engineering Design Documents (DED) for physical buildings and consistently carry out monitoring and evaluation
2. Access and equity	There is a risk that beneficiaries do not have access to sufficient capital and markets as a follow-up to their needs for business development for project interventions (This is referred to in output 3.2)	4/2	Moderate	Connecting beneficiaries with the bank and facilitating business licensing and facilitating product marketing
3. Human rights	There is a risk of losing the community's right to livelihood (economic rights) (This is referred to in output 3.2), and injustice in obtaining social assistance when a disaster occurs	4/2	Moderate	Taking inventory of directly affected communities as a basis for targets for providing assistance from

				the government and other parties
4. Gender and Women Empowerment	There is a risk that women get fewer opportunities than men due to the influence of community culture (This is referred to in output 1,2,3)	2/2	Low	Apply consistency in the proportion of women's and men's involvement in project activities
5. Core Labour right	There is a risk that local people will not get access to jobs for project infrastructure development (This is referred to in output 3.1.)	3/2	Low	Develop SOPs regarding local community involvement in project infrastructure development.
6. Indigenous People	There is a risk that local people do not want to be involved in project activities (This is referred to in output 1,2,3)	2/2	Low	Implement consistency in the proportion of involvement of local communities in project activities
7. Involuntary Resettlement	There is a risk that the local government will move settlements for very heavily affected communities (This is referred to in output 2.1).	3/1	Low	Building a dialogue process between the community, community leaders and the government to build an agreement in the event of resettlement
8. Protection Habitat	There is a risk of very slow growth of mangrove planting (This is referred to in output 3.1.) due to low community participation in plant maintenance	4/3	Moderate	The use of certified mangrove seeds and community assistance in carrying out maintenance and monitoring evaluations
9. Conservation of Biological Diversity	There is a risk of dominance of certain mangrove species over other species (This is referred to in output 3.1.).	2/1	Low	Cultivate mangrove seedlings consisting of several species that are suitable for the habitat conditions at the project site
10. Climate Change	There is a risk of release of Greenhouse Gases originating from vehicles	1/1	Low	Use of vehicles that emit low emissions

	transporting project materials (This is referred to in output 3.1.).			based on emission test results from the Department of Transportation.
11. Pollution prevention and resource efficiency	There is a risk of dust pollution due to the entry and exit of operational vehicles carrying project materials (This is referred to in output 3.1.)	1/1	Low	Conduct regular watering at project sites affected by dust.
12. Public health	There is a low risk of providing health facilities (sanitation, medicines) and handling public health when a flood occurs (ROB) (This is referred to in output 2.2.)	2/2	Low	Providing emergency facilities for handling public health at the time of a rob disaster including light medicines and provision of personal protective equipment
13. Marginalized and Vulnerable grup	There is a risk that vulnerable groups in society (disabled, women, elderly) are not given the opportunity by their families and relatives to be involved in project activities (This is referred to in output 1,2,3).	3/2	Low	Provide understanding and assistance to families of vulnerable groups and disabilities.
14. Lands and soil conservation	Risk of soil pollution due to additional plastic waste from project activities. (This is referred to in output 3.1.)	4/2	Moderate	Limiting the use of plastic in project activities

59 With risk identification per E&S Principles, the proposed project is categorized as C according to the categories specified in the ESP. Category C corresponds to projects with small potential impact risks, less widespread, reversible, and mitigated. The details of the analysis are as follows:

Table 12. Categorization definition

Questions	Component Answer YES / NO		
	1	2	3
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are diverse?	No	No	No
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are widespread?	No	No	No
Does the Project Outputs / Activities have significant adverse environmental or social impacts that are irreversible?	No	No	No
Does the Project Outputs / Activities have few adverse environmental or social impacts?	No	No	Yes

Does the Project Outputs / Activities have in small scale / low widespread adverse environmental or social impacts?	No	No	Yes
Does the Project Outputs / Activities have reversible or easily mitigated adverse environmental or social impacts?	No	No	Yes
Does the Project Outputs / Activities have no adverse environmental or social impacts?	Yes	Yes	Yes
<b>Categorization</b>	<b>C</b>	<b>C</b>	<b>B</b>

- 60 The results of the Component Categorization showed that the component 1 and component 2 are categorized as low risk (Category C) because the strengthened governance and institutional capacity There is no impact can be a risk on environmental and social. in component 2 is included in the low risk category (Category C) because capacity building on adaptation measures do not have an impact on the environment and social.
- 61 Component 3 is categorized as medium risk (Category B) Coastal ecosystems resilience and sustainable livelihoods because in this component there are several activities, especially infrastructure development which can have little impact on the environment and social.

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

### A. Record of endorsement on behalf of the government

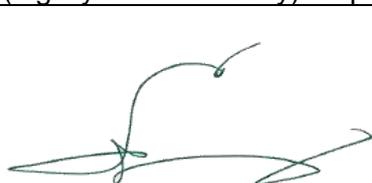
Provide *the* name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach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

H.Syahdan, ST,MT, Head of Regional Disaster Management Agency, Province of West Nusa Tenggara	Date: July 15, 2022
Julmansyah, S.Hut, M.A.P Head of Regional Office of Environment and Forestry Province of West Nusa Tenggara	Date: July 15,2022
Muslim, ST,M.Si Head of Regional Office of Marine and Fisheries Province of West Nusa Tenggara	Date: July 15,2022

### 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 (President Decree No. 16/2015; P.13/MENLHK/Setjen/OTL.0/1/2016; P.33/MENLHK/Setjen/Kum.1/3/2016; Indonesia Intended Nationally Determined Contribution/INDC; COP 21; Paris Agreement signed by Government of Indonesia; Book and Map of Information System of Vulnerability Index Data (SIDIK); Climate Change Adaptation National Action Plan) 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.



Laode M Syarif  
Executive Director of Kemitraan  
Implementing Entity Coordinator

Date: July 15, 2022

Tel. and email: +62-21-2278-0580  
Laode.syarif@kemitraan.or.id

Project Contact Person: Hasbi Berliani

Tel. And Email: ; +62-21-2278-0580, +62 812-3752-077; Hasbi.berliani@kemitraan.or.id

**Annex 1. Support letter from government of West Nusa Tenggara Province**





**PEMERINTAH PROVINSI NUSA TENGGARA BARAT  
DINAS KELAUTAN DAN PERIKANAN**

*Jalan Semanggi Nomor 8 Mataram, Kode Pos 83122  
Telepon (0370) 632083 Faks. (0370) 625963  
Email : [dislutkanntb@yahoo.com](mailto:dislutkanntb@yahoo.com) Website : [dislutikan.ntbprov.go.id](http://dislutikan.ntbprov.go.id)*

**LETTER OF SUPPORT**

Number : *523/126.3/05/Dislutikan/2022* .....

Responding a letter from the Transform organization, a member of the Lombok Climate Change Consortium, for the ideas for tackling rob and its impact in West Lombok Regency, we hereby express our support for the Proposed Program (Concept Note) entitled "Village Based Coastal Adaptation and Resillience in Lombok, Province of West Nusa Tenggara" proposed to the Programme Funding for Adaptation Fund

We consider this activity very important in supporting local government efforts to create community resilience and in the same time improve their livelihood in facing climate change in Province of West Nusa Tenggara.

Thus, we convey this Letter of Support, and we hope that it will become part of the strategic considerations of the proposals submitted to the Programme Funding for Adaptation Fund.

Mataram, 15 July 2022

Head of the Regional Office of Marine and Fisheries  
Province of West Nusa Tenggara.



*Muslim, ST., M.Si*

Pembina Tk. I/IVb

NIP: 197606012001121009

**Annex 2. Letter of Potential Cofinance Support**

**PROVINCIAL GOVERNMENT OF WEST NUSA TENGGARA  
REGIONAL DEVELOPMENT PLANNING AGENCY (BAPPEDA)**

Address : Jl. Flamboyan No. 2 Mataram Kode Pos 83126, Telepon/Faksimile (0370) 631581  
Email : [bappeda@ntbprov.go.id](mailto:bappeda@ntbprov.go.id) Website : [bappeda.ntbprov.go.id](http://bappeda.ntbprov.go.id)

ANNEX: NTB PROVINCIAL GOVERNMENT PROGRAMS IN LINE WITH  
THE PROPOSAL OF ADAPTATION FUND YEAR 2023

No	Name of Program	Activities	Budget (USD)	Leading Sector
1	Marine, coastal and small islands management	Coastal community empowerment	8,887	Marine and Fisheries Office
2	Fisheries and aquaculture management	fish farming techniques, processing and marketing	34,973	Marine and Fisheries Office
3	Development of Tourism Resources and Creative Economy	Implementation of Human Resource Capacity Building in Tourism and Creative Economy	9,130	Tourism office
4	Watershed Management	Application of soil and water conservation techniques	13,220	Environment and Forestry Office
	Amount		66,277	

Head of Bappeda of NTB Province.

Dr. Ir. H. ISWANDI, M.Si.  
NIP. 19651231 199403 1 153



**PROVINCIAL GOVERNMENT OF WEST NUSA TENGGARA  
REGIONAL DEVELOPMENT PLANNING AGENCY (BAPPEDA)**

Address : Jl. Flamboyan No. 2 Mataram Kode Pos 83126, Telepon/Faksimile (0370) 631581  
Email : [lap@prov.go.id](mailto:lap@prov.go.id) Website : [bappeda.ntbprov.go.id](http://bappeda.ntbprov.go.id)

Mataram, 5 January 2023

Number : 050 / 26 /01-Bappeda  
Attachment : -  
Re : Recommendation for Adaptation Fund Batch II 2022 Proposal

Attention to:  
The Adaptation Fund Board  
Secretariat 1818 H Street NW  
MSN N7-700, Washington, D.C., 20433 U.S.A

Dear Sir/Madam,

I hope my letter finds you in a good health and happiness. First of all, I would like to introduce myself. I am Iswandi, I work as the head of the Regional Development Planning Agency (Bappeda) of Nusa Tenggara Barat (NTB) Province, Indonesia. Our development planning trajectories aim to integrate the concept of sustainability for bringing more prosperity for the society in terms of economic, social, and environmental benefits. This will contribute to the global Sustainable Development Goals, especially Goal Number 13 regarding climate change. In doing our actions for mitigation and adaptation of climate change, we work together and form partnership with society, non-government organisations, academics, media, and other institutions.

The government of NTB Province has enacted the Local Regulation Number 2 Year 2021 regarding the Regional Medium-Term Development Plan (RPJMD) Year 2019-2023 of the West Nusa Tenggara Province. This RPJMD act as a guideline for all government departments and non-government organisations in undertaking development programs and activities to achieve the development goals. However, in undertaking the development programs, especially climate-related programs, financing is one of the challenges. Therefore, to support climate financing, it is important to have creative and innovate financing that can help all local actors to work together for the benefits of the society.

Further, I have discussed the proposal for climate adaptation fund with Lombok Climate Change Consortium, with the title "Village-Based Coastal Adaptation and Resilience in Lombok Province of West Nusa Tenggara". This great idea helps to accelerate the village development and form resilience to reduce the impacts of climate change in the society. This will contribute to reduce the impacts of climate change and promote a sustainable and inclusive development in West Nusa Tenggara Province. Our climate-related development programs are aligned with the Consortium proposal. Further, it will lead to more productive collaboration to achieve the SDGs and society welfare. The list of potential programs and activities for alignment with coastal climate adaptation program is attached in the annex.

In conclusion, I fully support this proposal to receive the grant from Adaptation Fund Batch II. If you have any questions regarding this, I am happy to discuss this further with you, by email [lap@bappeda.ntbprov.go.id](mailto:lap@bappeda.ntbprov.go.id), or +62 811-3940-0800. Thank you very much for your attention and I look forward to more productive collaboration for climate change programs in the near future.

Head of Bappeda of NTB Province,

  
Dr. Ir. H. ISWANDI, M.Si.  
NIP. 19651231 199403 1 153

CC to:  
1. Governor of Nusa Tenggara Barat Province;



**Project Formulation Grant (PFG)**

Submission Date: **February 7, 2023**

Adaptation Fund Project ID:  
 Country/ies: **Indonesia**  
 Title of Project/Programme: **Village Based Coastal Adaptation and Resillience in Lombok Province of West Nusa Tenggara.**  
 Type of IE (NIE/MIE): **NIE**  
 Implementing Entity: **Kemitraan – The Partnership for Governance Reform**  
 Executing Entity/ies: **Lombok Climate Change Consortium (LC3)**

**A. Project Preparation Timeframe**

Start date of PFG	<b>1 September 2023</b>
Completion date of PFG	<b>31 August 2024</b>

**B. Proposed Project Preparation Activities (\$)**

Describe the PFG activities and justifications:

List of Proposed Project Preparation Activities	Output of the PFG Activities	USD Amount
Data collection for baseline and analysis for each component	Collected data required to set up the basis for argument formulation and programme justification in the proposal	\$ 13.793
Travel meetings required for data collection and consultation	Confirmation of assumptions and situation on the ground before programme document finalized	\$ 12.931
Expert hiring for proposal writing	Assist Kemitraan in writing and use of collected baseline data to justify programme and enhance the proposal	\$ 19.655
Focus Group Discussion with Multistakeholders	To receive feedback and input on the Goal, Objective, Outcome and Output of the proposal which to be submitted to AF, so as to ensure it is in line with the national programmes and strategies of climate change adaptation	\$ 3.621
Total Project Formulation Grant		\$ 50.000

### C. Implementing Entity

This request has been prepared in accordance with the Adaptation Fund Board's procedures and meets the Adaptation Fund's criteria for project identification and formulation

Implementing Entity Coordinator, IE Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Laode M. Syarif, KEMITRAAN		February 7, 2023	Dewi Rizki	+6221-22780580	dewi.rizki@kemitraan.or.id

### Annex 3. Brief gender assessment in project location

#### A. GENDER ANALYSIS BY TOTAL OF POPULATION

Based on the BPS of West Lombok Regency which is contained in the publication of Gender Statistics of West Lombok Regency in 2020. The data presented describes the condition of women compared to men related to population, household, education, health and family planning issues, employment, household socioeconomic, public sector, housing and facilities. Data on the distribution of the population of each village in the project location is presented in the following figure:

Table 1. Gender Development Index (IDG) of West Lombok Regency

Regency	Gender Development Index (IDG)		
	2019	2020	2021
<b>West Lombok</b>	<b>56.32</b>	<b>55.91</b>	<b>57.56</b>
Central Lombok	57.45	57.53	60.13
East Lombok	65.67	65.52	65.99
Sumbawa	69.26	69.41	70.15
Dompu	64.30	64.17	64.45
Bima	52.61	52.62	53.26
West Sumbawa	49.06	49.07	49.22
North Lombok	47.19	47.22	47.40
Mataram City	76.46	76.23	76.42
Bima City	69.91	69.58	70.16
<b>Nusa Tenggara Barat</b>	<b>51.91</b>	<b>51.96</b>	<b>52.54</b>

Source : Statistik Gender West Lombok, 2020.

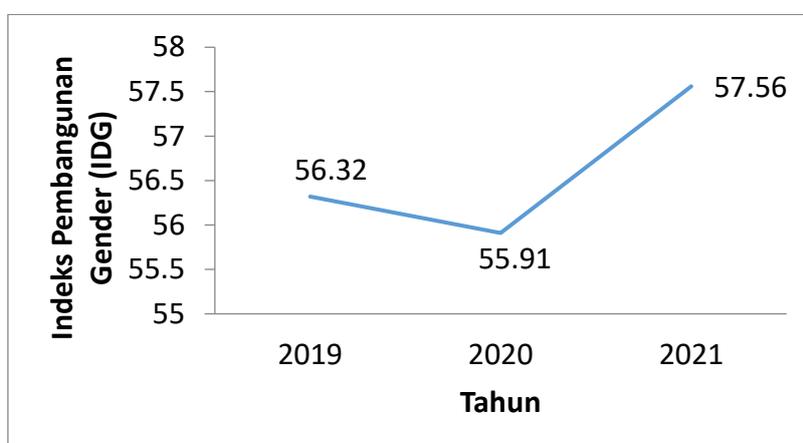


Figure 1. Gender Development Index 2019-2020

Figure 1 shows that in 2021 there will be an increase in the gender development index in West Lombok Regency by 1.65 which indicates a significant development towards gender development in West Lombok Regency in general and Lembar and Sekotong Districts in particular. Based on the gender-based population distribution analysis in the proposed project site, the largest population is in Sekotong Barat and Lembar Selatan Villages. The distribution of the population based on gender is described as follows:

Table 1. Distribution of population based on gender in project sites

No	Desa/kelurahan	Male	Female	Amount
<b>Kecamatan Sekotong</b>				
1	Sekotong Barat	5,135	4,864	9,999
2	Sekotong Tengah	4,226	4,191	8,417
3	Cendi Manik	2,889	2,843	5,732

Kecamatan Lembar				
1	Lembar	2,647	2,678	5,325
2	Labuan Tereng	3,200	3,135	6,335
3	Lembar Selatan	5,960	5,802	11,762

Source: BPS in Figures for 2021.

## B. GENDER ANALYSIS BASED ON HEALTH

The population of West Lombok in 2020 is projected to be 721.4 thousand people, with a male population of 361.6 thousand and a female population of 359.9 thousand. The number of male residents who experienced health complaints during the last month was less (44.45%) than the female population (47.04%). This is also reinforced by health complaints that interfere with daily activities (illness rate) the female population is lower (22.21%) than the male population (28.86%).

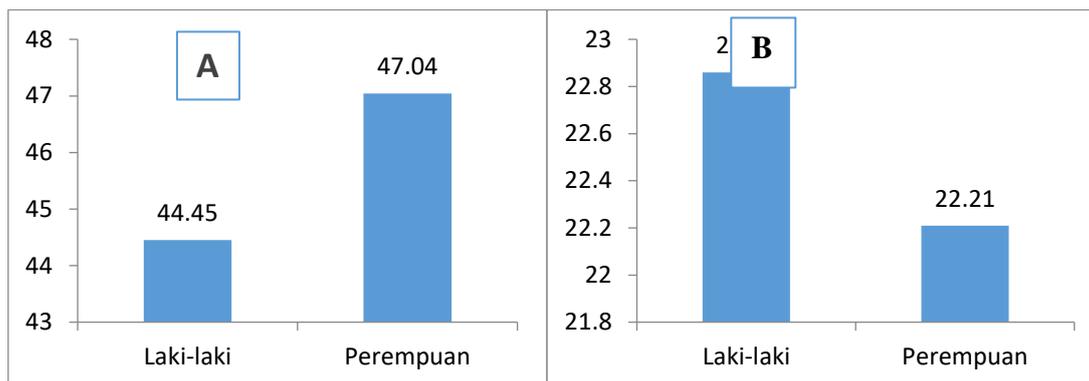


Figure 2. (A) Number of male residents who experience health complaints, (B) health complaints that interfere with daily activities (pain rate)

The largest number of population groups (male and female) are in the 0-4 year age group. Age structure of the population: In the middle age structure (intermediate). RJK 2010 = 95.49 percent, increased to 100.48 percent in 2020

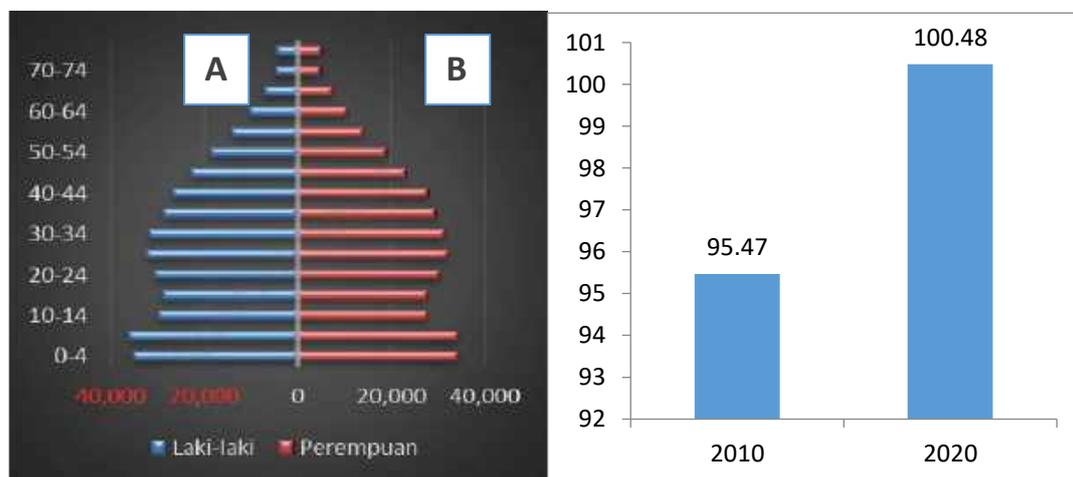


Figure 3. (A) Population Pyramid 2020 (B) Sex Ratio (RJK) in 2010 and 2020, Source: (A) Population Census 202, (B) Gender Statistics for West Lombok Regency in Figures 2020

## C. GENDER ANALYSIS BASED ON SOCIAL ECONOMIC STATUS OF THE HOUSEHOLD

Based on the general socioeconomic status of households in West Lombok Regency which includes the project community, it can be explained that there are fewer unmarried women than men, because the age at first marriage for women is generally younger than men. a small proportion of

households headed by women. This may be due to the understanding that men are in charge of the household economy.

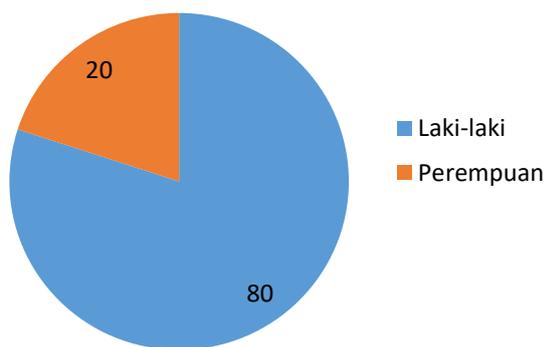


Figure 4. Percentage of households headed by women

Table 2. Percentage of Population Age 10 and over by gender and marital status in 2020

Gender	Marital Status			
	Single	Married	Divorced	Dead Divorced
Male	37,45	58,04	2,19	2,31
Female	27,41	59,13	3,75	9,71
Male and Female	32,28	58,60	3,00	6,12

Source: National social and economic survey, 2019

The number of households with KRT Male and female, whose source of household financing comes from remittances of money/goods, turns out to be more likely to receive remittances from their children.

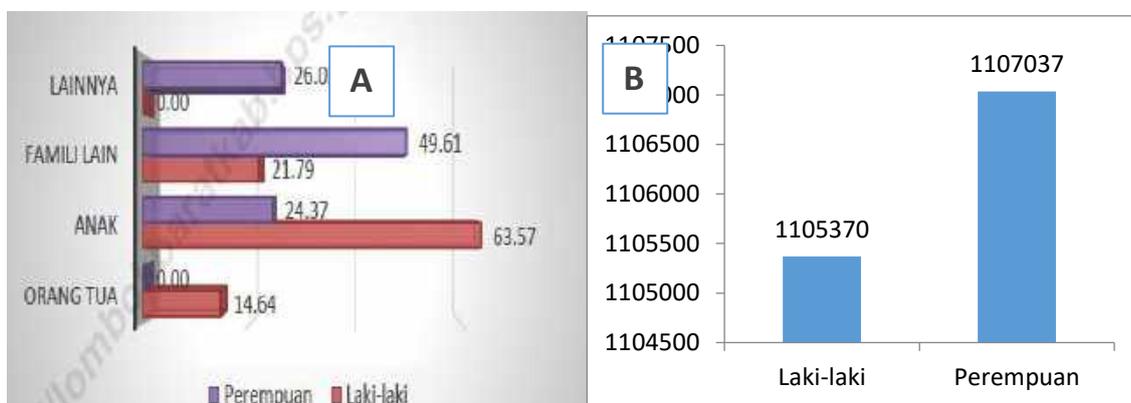


Figure 5. (A) Percentage of Sources of Household Financing Derived from Remittances of Money/Goods by Gender of Head of Head and Source, 2020, (B) Expenditure per capita per month in households with female household heads is higher than households with male household head man.

The number of households with KRT Male and female, whose source of household financing comes from remittances of money/goods, turns out to be more likely to receive remittances from their children. expenditure per capita per month for households with female household heads is higher than households with male household heads.

#### D. GENDER ANALYSIS BASED ON EDUCATION

There are more female residents who cannot read and write when compared to the male population

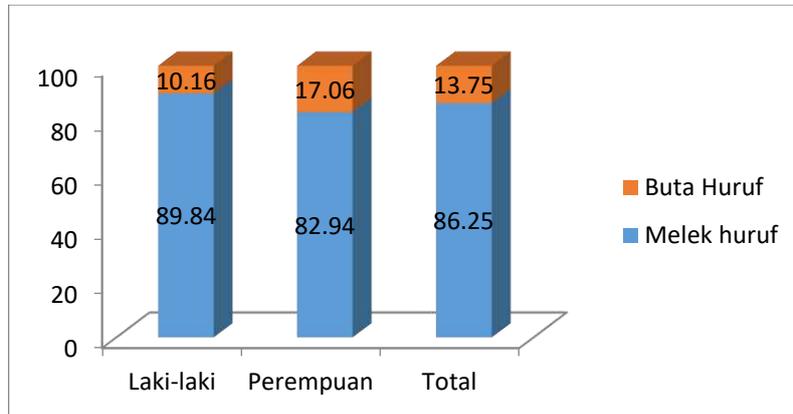


Figure 6. Percentage of Population Age 15 and Over by Gender and Reading and Writing Skills, 2020  
*Laki-laki = male; perempuan = female*

The percentage of the female population who does not have a diploma is higher than that of the male population. The population of women who have successfully completed basic education (at least graduated from junior high school) is lower than that of men.

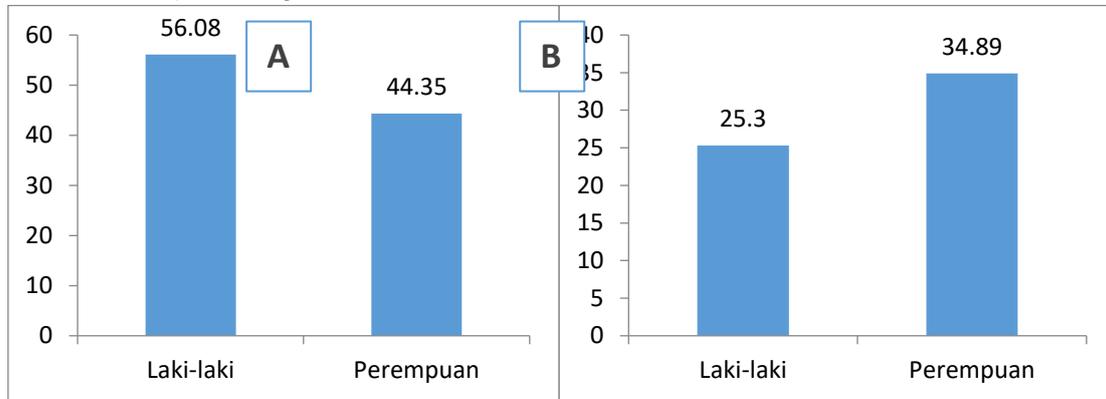


Figure 7. (A) Percentage of population aged 15 years and over who completed basic education by gender, 2020, (B) Percentage of population aged 15 years and over who do not have a diploma by gender, 2020

Table 3. Percentage of Population Age 7-24 Years by Gender and Educational Status, 2020

Gender	Never been to school	Still in school					Not in School anymore	Amount
		SD	SMP	SMA	PT	jumlah		
Male	0.18	32,4 6	17,9 1	17,2 6	5,6 8	73,30	26,52	100
Female	0.00	38,2 4	14,0 6	12,1 6	5,3 7	69,82	30,18	100

Source : National social and economic survey, 2020

Girls aged 4-6 years tend to attend pre-school education more than boys.

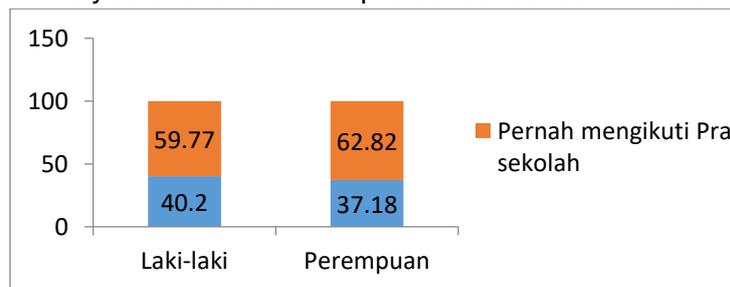


Figure 8. Percentage of Children Age 4-6 Years by Gender and Pre-School Education Participation, 2020

#### **Annex 4. Documentation of Stakeholder Consultation**



The activity was carried out on Tuesday 27 December 2022 at the West Lombok Regency BAPPEDA Office. The activity involved 19 people (14 men and 5 women) from elements including West Lombok BAPPEDA, BPBD NTB, Provincial PU PR, DLHK, BMKG, NGOs, Lembar Sub-District Head, Village Government, Fishermen's Groups and Environmental Youth Leaders. This FGD activity aims to deepen information related to various events, periods of occurrence, social and environmental impacts, as well as adaptation and mitigation programs from existing *rob* disasters. Some of the points from the discussion results include:

- Head of Emergency and Logistics BPBD Lobar said several villages were affected by the tidal flood, including the villages of Lembar Selatan, Pelangan, Sekotong Tengah, Sekotong Barat, Buwun Mas, Lembar, Cendi Manik, Taman Ayu and Labuhan Tereng. It is estimated that there are 1,450 more people affected
- Rob floods in the West Lombok district are frequent occurrences. The last time it happened was Friday 17 June 2022 in Lembar Village. Monitoring results from BPBD at least  $\pm$  207 households were affected by the Rob flood. in Buncit hamlet at least  $\pm$  70 families, Kebon Bongor hamlet as many as  $\pm$  97 families and Petak hamlet as many as  $\pm$  40 families.
- The impact of the Rob flood resulted in losses for residents in the form of inundating residents' homes, agricultural land and ponds owned by residents. West Lombok Regency BPBD has coordinated with the Provisional BPBD and other stakeholders for emergency management at the incident location.
- According to the BMKG Climatology Station Class I West Lombok, the Rob incident in West Lombok Regency was due to the La Nina phenomenon (extreme weather) in the form of strong winds and heavy rainfall. Rainfall in the NTB region on the third of September 2022 is dominated by the low category (<50 mm). The highest recorded rainfall occurred at Gunung Sari Rain Post, Kab. West Lombok of 154 mm/dasarian. The nature of rain on the third of September 2022 in the West Lombok Regency tends to vary from Below Normal (BN) to Above Normal (AN).
- Cemara Hamlet, Lembar Village is one of the areas that is prone to Rob disasters. Lastly, the water level can reach the knees of adults and lasts up to  $\pm$  2 hours. Residents who know that sea water is entering the settlement panic. However, residents remained in their homes.
- Tidal floods also occurred in several villages in Sekotong. Tagana Lobar said that there were three villages affected by the tidal flood. Among them, Madak Belek Hamlet 1, Empol Preparation Village, Kemanuk Hamlet, Buwun Mas Village, Pewaringan Hamlet, Pelangan Village.
- The South Lembar Village Government has not budgeted a special allocation of funds for handling Rob because the 2022 budget is still not optimal. Refocusing is still on handling Covid-19. We are

still waiting for changes in budget allocations from the central government, so that in the future the budget for handling Rob can be implemented with the existence of a legal budget umbrella.

- However, in 2022 the government together with self-help communities, especially Cemara Hamlet, have made a talud/trap to prevent the rob from entering the settlement. However, the talud that was built is felt to be lacking because it has not covered several Robust entry points into residents' settlements. Through this forum we hope that there will be notes that can serve as recommendations to the relevant agencies to jointly develop the Village, especially in handling the Rob disaster which often occurs in Lembar Selatan Village.
- When a Rob flood occurs, the sub-district and village governments immediately coordinate with BPBD Agency, Social Affairs and the Head of Maritime Office to evacuate residents affected by the disaster so that they can be dealt with immediately. So that the process of evacuating residents can be carried out.
- The government has also mediated with private parties close to the port area to jointly contribute to adaptation and handling of Rob floods. The mediation process is still ongoing, hopefully in the future there will be a green light.
- Adaptation activities have been carried out by several groups including: DLH West Lombok Regency, together with the South Lembar Village Government, BRI Bank and youth such as by planting 2,000 mangroves in the Cemara Beach tourist area and planting activities with the Indonesian Air Force in commemoration world mangroves day
- Careful planning is needed for the roadmap for the coastal area of the Cedar Hamlet so that tourism development and management plans can be integrated with disaster response development. Because this location is very vulnerable to the tidal water disaster. So that all stakeholders such as NGOs, Government, Entrepreneurs, Community Leaders, Youth Leaders and other elements to sit together to build Cedar Hamlet and West Lombok
- Whereas the 2023 Village Fund Budget (ADD) has not yet been determined, but there has been a commitment from village officials to oversee the disaster budget, both for improving the community's economy and the environment to be discussed in hamlet and village meetings as a priority program