

AFB/PPRC.35/Inf.1 17 March 2025

Adaptation Fund Board Project and Programme Review Committee Thirty-fifth Meeting Bonn, Germany, 8-9 April 2025

PROPOSAL FOR INDONESIA (1)



ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY:

Country/Region: Indonesia

Project Title: Strengthening Community Climate Change Adaptation in the Neck of Sulawesi Island Ecoregions through the Climate

Village Program (PROKLIM)

Thematic Focal Area: Forest, Lowland, Coastal and Marine

Implementing Entity: Kemitraan (Partnership for Governance Reform) **Executing Entities:** Consortium KUAT (Karsa, Komiu, AwamGreen, Untad)

AF Project ID: AF00000310

IE Project ID: Requested Financing from Adaptation Fund (US Dollars): 999,226

Reviewer and contact person: Camila Florez Co-reviewer(s):

IE Contact Person:

Technical Summary

The project "Strengthening Community Climate Change Adaptation in the Neck of Sulawesi Island Ecoregions through the Climate Village Program (PROKLIM)" aims to enhance the effectiveness and capacity of rural communities to adapt to the impacts of climate change in the Neck of Sulawesi Ecoregion, Central Sulawesi Province. This will be done through the four components below:

<u>Component 1</u>: Improving access to resources for sustainable climate change adaptation at the village level (USD 243,760).

<u>Component 2:</u> Environmental improvement through strengthening social forestry, rehabilitating critical areas, and proposing the establishment of new protected areas (USD 270,184)

Component 3: Social and economic resilience through livelihood improvement (USD 215,166)

Component 4: Provision of instruments and regional policies aimed at reinforcing adaptation efforts and securing the long-term sustainability of the program (USD 104,346)

Requested financing overview:

Project/Programme Execution Cost: USD 87,490

	Total Project/Programme Cost: USD 920,946 Implementing Fee: USD 78,280 Financing Requested: USD 999,226
	The initial technical review raises several issues, such as compliance with the ESP, insufficient information on possible duplication with other projects, and the consultation process, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Request (CAR) raised in the review.
	The second technical review raises several issues, such as the detailed budget and notes, compliance with the ESP, and the M&E plan, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Request (CAR) raised in the review.
Date:	January 18, 2025

Review Criteria	Questions	Comments 1 st Review – October 22, 2024	Comments 2 nd Review – January 18, 2025
Country Eligibility	Is the country party to the Kyoto Protocol and/or the Paris Agreement?	Yes.	-
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	Yes.	-
Project Eligibility	Has the designated government authority for the Adaptation Fund endorsed the project/programme?	Yes. As per the Endorsement letter dated August 5, 2022.	-
	Does the length of the proposal amount to no more than One hundred (100) pages for the fully-developed project	Yes. The proposal is 82 pages long, including annexes. CAR1: Kindly revise the project template, page 1, to mark that this	CAR1: Not cleared. As this project was submitted before as a

document, and one	proposal has been submitted	concept note, please unmark the box stating that
hundred (100) pages for its annexes?	before (as a concept note).	"this is the first submission ever of the proposal at any stage".
		CAR10 (NEW): The proposal document has several issues that need to be adjusted for ease of reading and consistency: 1) The numbering of tables in the document needs to be adjusted; there are several repetitions of numbering (e.g., 14, 15) in different sections. Please renumber the appropriate tables following the document's logical order. 2) Please make sure that all acronyms are spelled out the first time they are used (several have not been spelled out at all), and include a list of acronyms at the beginning of the document. 3) There is an issue with paragraph numbers (e.g., there are two paragraphs 46). 4) Finally, when you edit the project proposal, please make sure you use track changes; as it was submitted, the changes are not marked, which obstructs viewing the proponent's revisions.
	CR1: Please update the project	
	calendar as the start date indicated has passed.	CR1: Cleared. As per additional information provided on page 18.
3. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to t adverse effects of climate change and	Overall, the project supports rural communities in the Neck of Sulawesi Ecoregion. The project promotes the establishment of ProKlim villages, which undertake climate adaptation plans, the	

build in climate resilience?

engagement and establishment of protected areas, and the development of small-scale adaptive businesses.

CR2: The project scope seems large, considering the amount of funding. How will the project achieve its goals given the myriad of topics to be addressed (from forest and marine protected areas, climate adaptation in ProKlim villages, adaptive microbusinesses in forestry and fisheries, and the development of climate change institutions)? Are the different project dimensions (i.e., components) interlinked? What are the mechanisms to ensure that resources are mostly used in the concrete adaptation actions rather than in planning the multiple project dimensions?

CR3: Outcome 2.1 "Outcome 2.1. Strengthening community access through social forestry and Expansion of terrestrial protected areas/zones in the neck ecoregion" – what does increased access refer to in this outcome?

CR2: Not cleared.

- 1. Please explain what the ultimate objective is of determining two coastal protected areas.
- 2. How is that related to the other project outcomes?
- 3. How will this address climate risks and vulnerabilities of fishermen?
- 4. Similarly, how will the agro-forestry activities enhance the effectiveness and capacity of rural communities to adapt climate impacts?

These issues need to be explicitly outlined to comprehend the project's logic. Please do so under each project outcome.

- 5. Also, regarding Component 1, Outcome 2, which activities are leading to enhancing access to information, communication, and technology, improving disaster preparedness, providing water management facilities, and increasing social access?
- 6. Kindly clarify the meaning / location of "Ranperdes".

CR3: Cleared.

CR4: A fully developed proposal should indicate the list of activities to be carried out under each project output. Please revise section II.A accordingly.

CR5: Under Component 3, the project will provide financial aid packages. Please explain the use of financial aid, and the conditionalities attached to it.

CR6: Please provide a legible version of the theory of change (ToC) figure.

CR7: Kindly include a list of terminologies used in the ToC.

As per additional information provided on page 20.

CR4: Cleared.

As per additional information provided on pages 19-24.

CR5:Not cleared.

- 1. Please indicate the size of the financial aid packages (in USD), and how many beneficiaries will directly receive it.
- 2. Please indicate which conditions the beneficiaries would need to comply with to receive the packages (e.g., participate in business training and have business plans).
- 3. Also, please explain the kind of training under Output 3.1.3 and this provides adaptive knowledge to deal with climate risks.

CR6: Cleared.

As per additional information provided on Annex 3.

4. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	Yes, but further information is needed. The project directly supports 1,044 individuals, and indirectly 23,149 individuals living 15 villages across 6 sub-districts in the project sites in Donggala and Parigi Moutong districts. The project targets vulnerable households, women, and those in extreme poverty. Project beneficiaries include indigenous peoples of the Lauje tribe, the Damelas tribe and the Kaili tribe. The project also will restore and improve 8,529 hectares of forests, 130 hectares of mangroves, and 10 hectares of coral reefs through rehabilitation activities.	CR7: Cleared. As per additional information provided on Annex 3.
	CR8: 1. Please indicate the benefits to indigenous peoples in the 15 prioritized villages. Please also indicate the proportion of beneficiaries that are indigenous people. 2. A table of beneficiaries is	CR8: Not cleared. Please indicate in section II. B how will the project ensure the equitable distribution of benefits to indigenous groups, particularly in the villages where they are a minority. Also, please indicate again the proportion of indigenous

	presented at annex 2.1 however this is not legible. Please provide an image which can be read.	beneficiaries in section II.B. (paragraph 70)
5. Is the project / programme cost effective?	Yes, but further information is needed. The proposal has demonstrated the project's overall costeffectiveness. This will be further substantiated as the proposal includes details on the project activities (CR4) and clarifications on the project scope (CR2). CR9: Kindly demonstrate that the selected approach is effective compared to alternative adaptation options that could have taken place to help strengthen rural communities' capacity to adapt to climate change's impacts.	CR9: Not cleared. Thank you for the information on paragraphs 80 – 81. This sort of comparison would be necessary for each project component. Though it is not necessary to provide such detailed information, a synthesized version of the information provided per each output would be ideal.
6. Is the project / programme consistent with national or sub- national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national	Yes, but further information is needed. The project is consistent with Indonesia's NDC and the Climate Resilience Enhancement strategy, as well as other relevant national policies. CR10: Please explain in further detail the alignment of the project with the adaptation priorities set in	CR10: Cleared. As per additional information provided on pages 32-33.

communications and adaptation programs of action and other relevant instruments? 7. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?	Unclear. CR11: Please clarify how the project will comply with national technical standards that must be followed to implement project activities. Such standards may include Environmental Impact Assessments (EIAs), building codes, water quality regulations, agricultural and forest regulations, fisheries regulations, and other sector-specific standards.	CR11: Cleared. As per additional information provided on pages 33-36.
8. Is there duplication of project / programme with other funding sources?	Unclear. CR12: The proposal has indicated complementarity with the FIP project. However, there may be other projects that are relevant such as the GEF-funded IFAD "Strengthened Systems for Community-based Conservation of Forests and Peatland Landscapes in Indonesia (CoPLI)" project and UNOPS and Indonesia's "Strengthening Village-based Climate Actions and Livelihoods (PROKLIM)" project to be implemented in in Palembang, South Sumatra province. Kindly	CR12: Not cleared. 1. For the IFAD and UNOPS projects, please clarify whether there is a thematic overlap, and given that there is no geographical one, how can the proposed project learn from these two projects? 2. Similarly, regarding the CAPPA project, what have been the lessons learned, and how can the proposed project build on it?

9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	identify all relevant projects and describe the lack of duplication. Yes, but further information is needed. CR13: Although the project has indicated some aspects of knowledge management and dissemination, please explain the specific activities that will take place to gather and disseminate lessons from the project itself, including knowledge about what kind of approaches and practices work. Furthermore, at the fully developed proposal stage, a more detailed explanation of the plans to learn from relevant projects, programs, initiatives, and evaluations is needed, given the interlinkages with other projects/initiatives on agriculture, forestry, fisheries, protected areas, and adaptive small businesses in the country.	CR13: Not cleared. 1. Please indicate which type of project lessons will be disseminated. 2. Also, please address the request for a detailed explanation of the plans to learn from other projects, given the existing interlinkages of the proposed initiatives.
10. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations in compliance with the	An initial consultative process has taken place. The consultations have been conducted with key governmental actors, other relevant actors from academia, and civil society organizations, as well	

Environmental and Social Policy and Gender Policy of the Fund?

as indigenous leaders. Nevertheless, the consultative process has not included vulnerable groups, nor has it included gender considerations.

CR14: Please detail the topics discussed during the consultation process per meeting and the issues raised per type of organization. Kindly indicate the meeting dates.

CR15: Please clarify how the consultative process integrated gender considerations for the project.

CR16: Please also clarify whether representatives of the target 15 villages were consulted and how their interests and concerns were taken into account in the project design.

CR17: It is unclear if the consultative process has shared the project objectives, scope, and approach with the local communities to 1) validate the approach taken, and 2) gather any concerns about the project. Please clarify.

CR18: Given that the project beneficiaries include indigenous

CR14: Cleared.

As per additional information provided on pages 40-44.

CR15: Not cleared.

Please explain which were the key gender insights gathered during the consultation process and which ones have been included/informed the project design.

CR16: Cleared.

As per additional information provided on pages 39-44.

CR17: Cleared.

As per additional information provided on pages 44-45.

	peoples, including them in the consultation is highly relevant. As per the AF ESP, please describe how the project will be consistent with UNDRIP, and particularly regarding Free, Prior, Informed Consent (FPIC) during project implementation; and provide further detailed outcomes of the consultation process of the indigenous people.	CR 18: Not cleared. 1. Please indicate the date of the consultations with the indigenous peoples (Paragraph 117). 2. Also please describe how the project will be consistent with UNDRIP, and particularly regarding Free, Prior, Informed Consent (FPIC) during project implementation.
11. Is the requested financing justified on the basis of full cost of adaptation reasoning?	Yes . As per information provided on pages 29-31.	-
12. Is the project / program aligned with AF's results framework?	Yes.	-
13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	Yes, but further information is needed. CR19: Kindly address the project's	CR19: Cleared.
	environmental sustainability.	As per additional information provided on page 50.

14. Does the project / programme provide an overview of environmental and social impacts / risks identified, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	Unclear. The proposal provides an overview of management approaches to decrease unnamed risks by each of the AF principles. The risk findings are not substantiated for the fully developed proposal. CAR1: Please indicate the risk category of the project as per the AF ESP.
	CAR2: The proposal does not explain the risks per se; rather, it explains management measures that would potentially prevent certain risks from occurring. Please explain risks in detail, and their grading should be substantiated—this applies to the 15 principles. In cases, such as the human rights principle, when a potential risk is identified, it is not clear why the project does not consider its further assessment.
	CR20: As project activities are

CAR1: Not cleared.

Please indicate the risk Category A, B, or C as per AF ESP guidance: https://www.adaptation-fund-Guidance-document-for-Implementing-Entities-on-compliance-with-the-Adaptation-Fund-Environmental-and-Social-Policy.pdf

CAR2: Not cleared.

Section II. K. needs to have a brief explanation of risks as this shows the initial risk screening of the project. In the cases where the risks have been estimated as low, an explanation needs to be given on why is the case, beyond the project aims. Please note that project activities can have unintentional consequences, and thus risks may exist. Please revise thoroughly.

CR20: Not cleared.

further specified as per CR4 (e.g.,

specific land restoration activities),

a comprehensive review of the risks should be included the full

Please address the request.

			proposal.	
Resource Availability	3.	Is the requested project / programme funding within the cap of the country?	Yes.	-
	4.	Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	Yes, but further information is needed. CR21: Please revise all figures in the project proposal to separate thousands by a comma (instead of a point).	CR21: Not cleared. Please revise all \$ figures in text and tables throughout the document.
	5.	Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	Yes, but further information is needed. CR22: Please revise the figure given for the total project cost in Table 5: Components and Financing of Projects/Programs, which should include both the execution cost and the cost of the different components (833,456+87,490)	CR22: Cleared.
Eligibility of IE	6.	Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes. Kemitraan is a national implementing entity - Accreditation Expiration Date: 29 September 2026.	-
Implementation	7.	Is there adequate	Yes, but further information is	

Arrangements		arrangement for project / programme management, in compliance with the Gender Policy of the Fund?	needed. Implementation arrangements clearly describe the roles and responsibilities for the consortium's project implementation.	
			CR23 : Please include a description of the role and responsibilities of the implementing entity.	CR23: Not cleared. Please include in paragraph 145, in the table, all the roles indicated in the figure, including the ME manager/officer, expert/specialist, and financial assistant, as well as the consultants indicated.
			CR24: The implementation arrangements should incorporate gender-responsive elements. Please revise.	CR24: Not cleared. Please explain the role of the gender consultant.
	8.	Are there measures for financial and project/programme risk management?	Yes, but further information is needed. CR25: The project may face institutional risks, for example, coordination delays due to changing authorities or institutional barriers to establishing the protected areas. Kindly identify relevant institutional risks that could affect the proposed project and appropriate mitigation measures.	 CR25: Not cleared. 1. Please further explain the social and environmental risks associated to the project management, and the measures that can be taken by the management to address these. 2. Also, Table 16 is repeated in the document, please only keep the one in the appropriate section
	9.	Are there measures in place for the management of environmental and	No. CAR3: The proposal includes a	CAR3: Not cleared.
		social risks, in line with the Environmental and Social	limited Environmental and Social Plan, which lists mitigation	There are no clear means of verification regarding the mitigation measures outlined.

Policy and Gender Policy of the Fund?

measures but does not include responsibilities and means of verification. Please revise.

CAR4: The proposal should include a detailed description of each risk and an explanation of the assumptions that justify the risk level in the screening process (Section II.K).

CR26: Please indicate the significance of each risk (in terms of probability and severity before and after the mitigation measures).

CAR5: Please provide details on the budget provisions to cover the ESMP costs.

CR27: Please provide details on the EE's and IE's role in ensuring the implementation of the ESMP. Please revise following the AF's ESP guidance: https://www.adaptation-fund.org/wp-content/uploads/2016/07/ESP-Guidance_Revised-in-June-2016_Guidance-document-for-Implementing-Entities-on-compliance-with-the-Adaptation-Fund-Environmental-and-Social-Policy.pdf

CAR4: Not cleared.

In the cases where the risk has been assessed a negligible, it needs to be clear why this is the case – which should be already explained in section II.K.

CR26: Not cleared.

Please add additional columns to Table 17, clearly indicating the probability and severity of the risks. Please revise following the AF's ESP guidance: https://www.adaptation-fund.org/wp-content/uploads/2016/07/ESP-Guidance_Revised-in-June-2016_Guidance-document-for-Implementing-Entities-on-compliance-with-the-Adaptation-Fund-Environmental-and-Social-Policy.pdf

CAR5: Not cleared.

The M&E budget (Table 18) is not related to the ESMP costs. Please revise. Also please put the appropriate headings in English.

CR27: Partially.

		The provided description is too general. Please revise.
10. Is a budget on the Implementing Entity Management Fee use included?	No. CAR5: Please provide a breakdown of the Implementing	CAR5: Not cleared.
	Entity Management Fee, including budget notes immediately after.	As requested, please provide a table indicating the breakdown of Implementing Entity Management Fee, including budget notes immediately after.
11. Is an explanation and a breakdown of the execution costs included?	Yes, but further information is needed.	
	CR28: The execution costs do not include any provisions for monitoring and evaluation expenses, which may be necessary to consider.	CR28: Not cleared. The proponent has referred to table 16 (Analysis of Financial and Management Risk); however, this one is not related to execution costs. Further, it sees that the breakdown of execution costs table is no longer in the document. Please verify and make sure the table includes provisions for M&E.
12. Is a detailed budget including budget notes included?	Yes, but further information is needed. The detailed budget includes information at the project activity level and provides information regarding costs. Listing the standard costs (e.g., workshops) estimated as budget notes would be helpful.	
	CAR6: Please include the detailed budget in the main document (not as a separate Excel file). Ensure all headers and information are in	CAR6: Not cleared. The budget on the main document should be detailed at the activity level, by year, quantity, unit costs, etc. Additionally, budget notes can be

	English and/or acronyms are indicated. CR29: Please budget table to ensure that the total project cost, includes both the execution cost and the cost of the different components (833,456+87,490). Also, see CR22. CR30: Kindly indicate in the budget the resources allocated for gender-responsive measures.	provided in an additional table below, indicating how these costs have been calculated. Please revise. CR29: Not cleared. Please edit execution cost figure, it is missing a 0.
		CR30: Not cleared. The budget does not indicate the requested changes.
13. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators, in compliance with the Gender Policy of the Fund?	No. CAR7: The proposal does not include a budgeted M&E plan or provisions for the terminal evaluation. Please address accordingly. CR31: Please specifically outline how gender considerations will be incorporated during M&E implementation.	CAR7. Not cleared. The proposal needs to include a detailed M&E plan, indicating targets and indicators, as well as responsible parties, budget, and milestones. Also, the table provided in Annex 8 is lacking all this information. CR31: Not cleared.
	CR32: The project calendar includes multiple dates for a mid-	In addition to stating compliance, the M&E plan should further show that it includes gender

	term review. Please revise.	considerations. Please revise.
		CR32: Not cleared. The project calendar (Table 6) needs to be revised as requested.
14. Does the M&E Framework include a break-down of how implementing entity IE fees will be utilized in the supervision of the M&E function?	No. CAR8: An implementing entity budget breakdown has not been provided, and thus, it is unclear how the implementing entity fees will be utilized in supervising the M&E function. Please revise.	CAR8: Not cleared. Please include an additional table with the breakdown of the IE Fees. Also CAR5.
15. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	Yes, but further information is needed. CR33: Indicators should be disaggregated by sex; please revise. CAR9: Please include the core impact indicator in section E (Part III) of the proposal. The core impact indicator, number of beneficiaries (direct and indirect), is mandatory. Other impact indicators are to be selected based on the project activities, such as Natural Assets Protected or Rehabilitated. CR34: On table E, please update the heading for spelling and amend the indicator associated with	CR33: Not cleared. Indicators have not been revised as requested (Section E, Table 14). CAR9: Not cleared. As previously requested the changes need to be in Section E, Table 14 (results framework).

	Output 1. 1.2 as it currently reads as a target. CR35: In Part III Table F, please ensure that the grant amounts assigned to the fund outcome indicators are separated by outcome and that outcome costs are not lumped together. CR35: Please fix Table 16, as the component's funding grants do not match the budget table.	CR34: Cleared. As per additional information on page 64. CR35: Cleared. As per additional information on pages 74-75.
16. Is a disbursement schedule with time-bound milestones included?	Yes, but more information is needed. CR36: Kindly revise the disbursement table dates.	CR35 (b): Cleared. As per additional information provided on pages 74-75. CR36: Cleared.



FULLY DEVELOPED PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme:	Strengthening Community Climate Change Adaptation in the Neck of Sulawesi Island Ecoregions through the Climate Village Program (PROKLIM)				
Country:	Indonesia				
Thematic Focal Area:	Forest, Lowland, Coastal and Marine				
Type of Implementing Entity:	National Implementing Entity				
Implementing Entity:	Kemitraan (Partnership for Governance Reform)				
Executing Entities: Untad)	Consortium KUAT (Karsa, Komiu, AwamGreen,				
Amount of Financing Requested	\$US 999,226 (in U.S Dollars Equivalent)				
Letter of Endorsement (LOE) sig	ned: Yes ⊠				
NOTE: The LOE should be signed by the Designated Authority (DA). The signatory DA must be on file with the Adaptation Fund. To find the DA currently on file check this page: https://www.adaptation-fund.org/apply-funding/designated-authorities					
Stage of Submission:					
☐⊠ This proposal has been submitted before including at a different stage (concept, fully-developed proposal)					
☐⊠ This is the first submission ever of the proposal at any stage					
In case of a <i>resubmission</i> , please ir	ndicate the last submission date: Click or tap to enter a date.				

Project/Programme Background and Context:

1.1. Background and Program Context

1.1.1. General Context

- 1. This project will be implemented in Ecoregion "Neck of Sulawesi Island" landscape which covers plateau that extends from north to south, and the coast along the West Coast and East Coast. Landscape area 533,915 hectare and that was thinnest part of mainland and shaped like letter "K". Neck of Sulawesi Island Ecoregion flanked by two famous water system, which are Makassar Strait and Tomini Bay (the largest bay in Indonesia). Geographically, the general people of Sulawesi called west coast as "Pantai Barat" and east coast as "Pantai Timur".
- 2. Furthermore, its location between two open-sea systems exposes this region to direct impacts from the dynamic climate of the Makassar Strait and Tomini Gulf, which undergo frequent and extreme changes. This leads to increased climate variability, as measured by the intensity of hydrometeorological disasters. In the agricultural sector, which is the main source of livelihood for the local population, there has been a noticeable decline in the production and productivity of cocoa, coconut, and other major commodities in both the highlands and coastal areas of the Sulawesi Neck ecoregion. Additionally, this area is situated between two open seas (the Makassar Strait and Tomini Gulf), which heightens vulnerability to potential extreme impacts of marine climate dynamics, especially climate-related hydrometeorological disasters. The agricultural sector, the primary source of income for the local community, has experienced a significant drop in the production of staple crops like cocoa and coconut in the highlands and coastal regions of the Sulawesi Neck
- 3. The primary intervention will take place in two districts: Donggala and Parigi Moutong. Donggala comprises 16 sub-districts, which are further divided into 167 villages, while Parigi Moutong consists of 23 sub-districts, with a total of 284 villages. This project will focus its interventions on 8 sub-districts in Donggala and 7 sub-districts in Parigi Moutong, with a combined population of 284,020 people
- 4. The Neck of Sulawesi is facing an escalation in the degradation of both terrestrial and marine ecosystems, as well as deforestation. Land use and changes in land use, such as the expansion of large plantations, new settlements, and illegal mining, destructive fishing are among the primary causes. The increase in damage to mangrove forests and coral reefs has reached 27% in Donggala and 34% in Parigi Moutong
- 5. The issue is that the escalating threats and risks associated with climate change are having a disproportionately negative impact on the population's adaptive capacity and the environmental carrying capacity. Currently, the condition of the ecoregion is in a critical situation. Baseline data shows that degradation and deforestation are increasing over time, leading to the expansion of agricultural land, settlements, and the operation of illegal mining, which constitutes unplanned deforestation. At the same time, ecosystem damage also occurs in coastal areas; mangrove ecosystems and coral reefs with a damage level reaching 27% in Donggala Regency and 34% in Parigi Moutong Regency. The problem is the increasing threats and risks of climate change impacts are inversely proportional to the adaptive capacity of the population and the environmental carrying capacity. Currently, the condition of the Sulawesi neck is in a critical situation. Baseline data shows that degradation and deforestation are increasing over time, leading to the expansion of agricultural land, settlements, and the operation of illegal mining, which constitutes unplanned deforestation. At the same time, ecosystem damage also occurs

in coastal areas; mangrove ecosystems and coral reefs with a damage level reaching 27% in Donggala Regency and 34% in Parigi Moutong Regency. The declining environmental capacity is directly proportional to the increasing poverty rate in this area, significantly increasing the vulnerability of communities and households due to the impacts of climate change. On the other hand, increasing adaptation capacity in this area poses many challenges. This effort requires objective, inclusive, and systematic adaptation initiatives and actions. These preconditions are not available at all levels, as the community or local government has not yet seen climate change as a serious issue, an urgent issue to be responded to

- 6. The neck of Sulawesi region, particularly in the two targeted districts, has been extensively developed by the Central Sulawesi Provincial Government. This development is in preparation for supporting the new Indonesian National Capital (IKN), as legislated in the National Capital Act, Law Number 3 of 2022. Additionally, the Central Sulawesi Governor has recognized this area as a crucial support system for the IKN, as outlined in the Governor's Decree Number 504/117.1/DMBPR-G.ST/2022. This decree focuses on bolstering the region's ability to provide essential resources, particularly in food supply and construction materials. Key to this initiative is the development of local mining for sand, stone, and gravel, aimed at supporting the construction and infrastructure needs of the new capital.
- 7. The decline in environmental capacity in the region directly correlates with an increase in poverty rates, significantly heightening the vulnerability of communities and households to the impacts of climate change. On the other hand, enhancing the region's adaptive capacity presents many challenges. This effort requires objective, inclusive, and systematic adaptation initiatives and actions. These prerequisites are not uniformly available across all levels, as neither the local communities nor the regional government currently view climate change as a serious or urgent issue that demands immediate response. The Sulawesi Neck Ecoregion has been extensively prepared as a key supply area for the National Capital or "Ibu Kota Negara" (IKN), as established by Law Number 3 of 2022 concerning the National Capital. This decision has been well received and is considered strategic by the Central Sulawesi Government and the Donggala, Parigi Moutong, and Sigi districts. Geographically, these three districts hold strategic positions and natural resource potential that support the IKN system. Historically, these districts have had market relationships with cities along the east and north coasts of Borneo Island. The declaration of Central Sulawesi Province as a support system for the IKN was proclaimed through Governor's Decree Number 504/117.1/DMBPR-G.ST/2022 regarding the National Capital Region's Support System. At the grassroots level, the scope of the IKN support area defined in this decree is the Sulawesi Neck Ecoregion, with a focus on providing resources for food and construction materials, such as stone mining production
- 8. While the establishment of the National Capital (IKN) presents strategic opportunities, it also brings new challenges to the Sulawesi Neck Ecoregion, particularly in terms of ecosystem conservation and sustainable livelihoods. This is due to the lack of protective policies in the ecoregion and the absence of designated areas for the protection of coastal and terrestrial ecosystems. According to the Ministry of Environment and Forestry's Decree Number 8113 of 2018 regarding Forest Areas, conservation areas constitute only 1.8% or 8,524 hectares of the total ecoregion area, which spans 482,722 hectares. To counteract the trend of ecosystem degradation, efforts to enhance socio-economic resilience, reduce vulnerability to climate change, restore ecosystems, and provide a regulatory and institutional framework for climate, are needed. These are to promote the expansion of local protected areas, ecosystem restoration, enhancement of sustainable livelihoods, increased adaptation capacity, development of climate-sensitive political policies, and establishment of climate change adaptation institutions.

1.1.2. Environmental Context and Climate Change Impact

- 10. In Donggala Regency, there are 167 villages, and in Parigi Moutong Regency, there are 283 villages, each affected by climate change to varying degrees of vulnerability. 97% of the villages in both regencies are in a highly vulnerable state regarding climate change, with 11% falling into the most vulnerable category. This includes 27 villages in Donggala and 22 in Parigi Moutong. Out of these 49 villages classified as most vulnerable, 100 villages will be proposed to become ProKlim Villages, and 15 of them will be assisted intensively as ProKlim Pilot Villages and will also receive empowerment as part of the support system for the National Capital (IKN). In Donggala, there are 167 villages and in Parigi Moutong, 283 villages, each experiencing different levels of vulnerability to climate change. Again, 97% of these villages are highly vulnerable to climate change, with 11% being extremely vulnerable, including 27 villages in Donggala and 22 in Parigi Moutong. Of these 49 highly vulnerable villages, 15 will be targeted for intervention by the project
- 11. The villages targeted for intervention by this project, identified as the most vulnerable, have experienced tangible impacts from the phenomenon of climate change. Findings from a baseline survey conducted in 24 villages (including 15 villages targeted by the program) covering Donggala and Parigi Moutong Regencies between 16-22 November 2023, illustrate how the communities in these areas have faced various consequences such as crop failures and reduced agricultural productivity. This includes cropslike secondary crops, cloves, durian, coconuts, and cocoa, due to the lack of rainfall over the past two years. For instance, cloves and durians have been particularly affected, with almost no fruit yield as a result of numerous flower stalks falling and leaves wilting. Similarly, coconut and cocoa plants have also suffered, producing drastically fewer fruits due to insufficient rainfall.
- 12. In the capture fisheries sector, which is predominantly composed of small-scale and traditional fishermen, climate change has had a profound impact, restricting their fishing activities. Weather anomalies, large waves, and the scarcity of fish and other marine resources have led to a decrease in their income. The scarcity and reduced fish catch have forced fishermen to seek new, more distant fishing grounds, often in deeper waters, which requires significant capital and modern fishing equipment like large motorized boats. The risky sea conditions, including unpredictable weather and waves, have also caused some fishermen to switch professions to construction workers or farm laborers just to make ends meet. For villages located in highland areas, vulnerability to the impacts of climate change is exacerbated due to inadequate infrastructure, such as challenging road access. The villages affected include, but are not limited to, Ogoalas, Patingke, Pebounang, and others.
- 13. The vulnerability of the villages in this region is further demonstrated by the increasing frequency of landslides and flash floods, affecting both Donggala and Parigi Moutong Regencies. Findings from initial surveys and media clippings over recent years show how this area is often hit by floods that have caused significant damage and losses to agricultural lands, residential areas, and infrastructure such as roads, bridges, and public buildings. For instance, the Tinombo Hospital was damaged by a flood in mid-2022
- 14. The 15 villages selected for this project will be prepared and strengthened as ProKlim villages. Meanwhile, 85 other villages in the area will also be facilitated with ProKlim registration so that the total target for ProKlim registration in the SRN (National Registration System) is 100 villages. ProKlim (Program Komunitas Untuk Iklim), is a national scope managed by the

Ministry of Environment and Forestry in order to increase the involvement of the community and other stakeholders to strengthen adaptation capacity to the impacts of climate change, as well as to provide recognition of climate change adaptation and mitigation efforts that have been carried out which can improve welfare at the local level according to regional conditions. ProKlim is also a strategic step in localizing the global issue of climate change into joint action at the grassroots level. Apart from that, these villages will receive support and empowerment as part of the IKN (National Capital) area infrastructure.

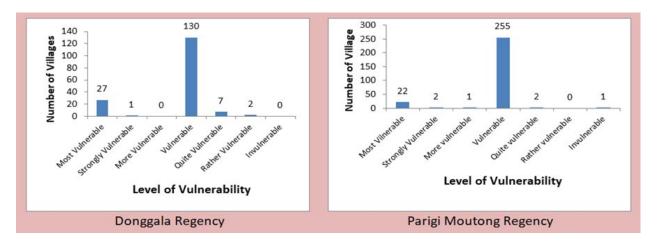


Figure 1. Graph of Climate Change Vulnerability (Data Source: Sidik, 2020).

Seasonal Patterns and Rainfall in the Sulawesi Neck Ecoregion

- 15. The Sulawesi Neck ecoregion falls within the Non-Seasonal Zone (Non ZOM), which means that this area does not have a distinct rainy season pattern throughout the year. As a result, it's highly challenging to predict the timing of rainy and dry seasons. Typically, non ZOM areas are characterized by having two peak rainy periods within a year (following an Equatorial pattern).
- 16. Based on monthly rainfall data from 1981 to 2021, the average rainfall in the Sulawesi Neck ecoregion is observed to be around 150 mm (moderate category). During this period, the region recorded its lowest rainfall, below 25 mm, in the years 1998 and 2016, while the highest rainfall exceeded 300 mm in 1995. Despite having a moderate average rainfall, this area experiences high rainfall intensity, reaching 100 150 mm per hour, and in some cases, it may even exceed 150 mm per hour during the peak of the rainy season. The trend of high rainfall intensity during these periods indicates an increasing tendency for the rainy season to have higher intensity in those years.

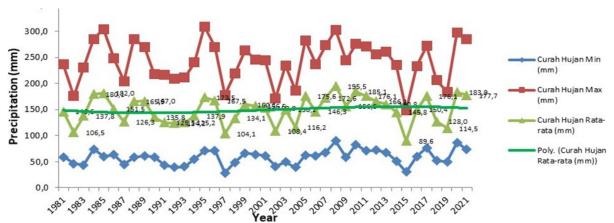


Figure 2. Rainfall Trends in the Neck of Sulawesi Ecoregion.

Conditions and Projections of Surface Temperature in the Sulawesi Neck Ecoregion

17. Monitoring results of temperature conditions over the past 21 years indicates a trend of increasing land surface temperatures in the Sulawesi Neck Ecoregion. The average increase in land surface temperature ranges from 1.85°C to 2.85°C. When compared with 10 years of rainfall data, this comparison suggests the potential for longer dry seasons, leading to reduced rainfall accompanied by an increase in air temperature.

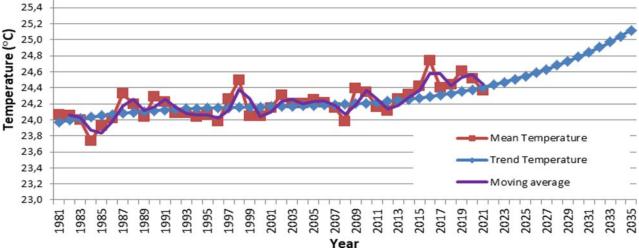


Figure 3. Average and Maximum Temperatures from 2000 to 2022.

- 18. Further utilizing data from BMKG (Meteorological, Climatological, and Geophysical Agency) on the 'High- Resolution Climate Projection for the Sulawesi Region,' which involves analyzing combined data of rainfall and air temperature with a baseline reference of 2006 2014, the average temperature in Donggala and Parigi Moutong districts is projected to increase between 1.85°C and 2.85°C by the year 2035. Specifically, land temperatures on the west coast, which is part of Donggala district, are expected to rise sharply compared to the land surface temperatures on the east coast, which is part of the Parigi Moutong district
- 19. Based on the time series data of 8-Day L3 Global 1 km Land Surface Temperature/Emissivity from 2000 to 2021, the average land surface temperature in the Neck of Sulawesi Ecoregion has shown an increase, as indicated in the following graph:

Image showing the temperature changes at the project location from 2010 to 2021.

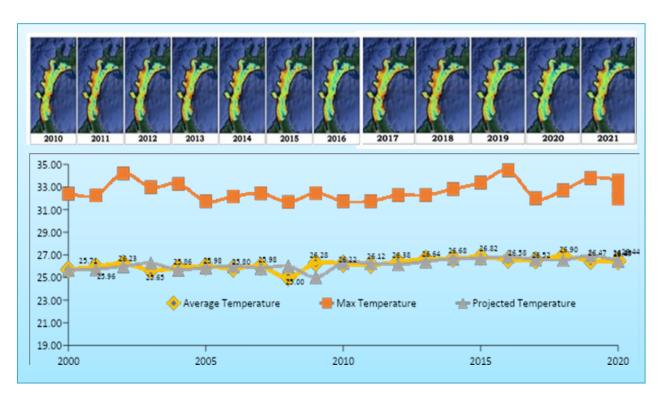


Figure 4. Prediction of land surface temperature increase in the Sulawesi Neck Ecoregion until 2035 (data source: ERA5).

20. The increase in average temperature accompanied by a decrease in annual average rainfall results in longer dry months compared to wet months. As explained earlier, the decrease in rainfall increases the likelihood of high-intensity rainfall during the peak of the rainy season.

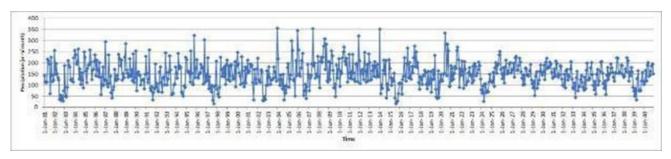


Figure 5. Prediction of temperature increase in the Sulawesi Neck Ecoregion until 2035 (Data source: ERA5).

Land Cover Dynamics and Transitions

21. Forests play a crucial role in combating climate change, acting as key agents in absorbing and storing carbon emissions in the form of biomass. Deforestation not only triggers a decline in the forest's ability to absorb emissions but also leads to a reduction in forest carbon emissions. In the context of adaptation, forests have a vital role. Up to this point, forests continue to be an alternative livelihood source for village communities, especially for the poor. The presence of forests enables communities to utilize wood and bamboo for construction materials. Additionally, forests provide supplementary food sources and

- traditional medicinal resources. For indigenous people, such as the Lauje tribe living in the western coastal mountains, forests supply a major part of their protein needs through hunting. Forests also play a significant role in preventing floods and erosion
- 22. The Sulawesi Neck ecoregion spans an area of 553,915 hectares. Based on Decree No. 8113 of 2018 regarding Forest Areas, it is categorized as follows: 1) 'Other Land' covering 233,061 hectares, 2) Permanent Production Forest at 10,826 hectares, 3) Conversion Production Forest covering 6,264 hectares, 4) Limited Production Forest spanning 131,546 hectares, 5) Protected Forest encompassing 92,549 hectares, and 6) Conservation Forest Area at 8,524 hectares
- 23. Data on the coverage of natural forests, agriculture, and non-forestry lands over the last 20 years show differing trends. The trend of deforestation in agricultural lands monitored in both regencies has increased significantly. In Donggala Regency, there has been a 25% increase in the classification of agricultural land from 2000 to 2019, and a 6% decrease in forest cover. Meanwhile, in the same period in Parigi Moutong Regency, forest cover has decreased by 9%, and there has been a 1.6% increase in the coverage of dry agricultural land.

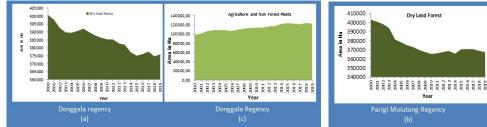


Figure 6. Forest cover and coverage of agricultural and non-forest plants in Donggala and Parigi Moutong Regencies

Agriculture and Non Forest Plants

24. The condition of mangrove cover and the extent of aquaculture ponds in both regencies are relatively the same. A significant decrease in mangrove cover occurred in two phases; at the beginning of 2000 and approaching 2020. There was a significant increase in the number of fish ponds; starting in the early 2000s and from 2013 to 2019. In Donggala Regency, mangrove cover decreased by 27% and fishponds increased by 700%, while in Parigi Moutong Regency, mangrove cover decreased by 34% and fishponds increased by 879%

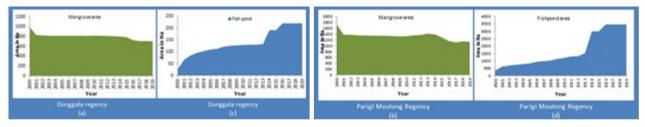


Figure 7. Mangrove cover and **aquaculture** area in Donggala and Parigi Moutong Regencies.

25. Community members living near natural forests are highly vulnerable to the impacts of climate change, which includes changes in the ecosystem that can have cascading effects on the ecological, social, and especially economic sectors. Empowering these communities through enhancing their capacity and scientific knowledge is essential. This will enable them to understand the relationship between the vulnerability of tropical rainforests and their

- communities, and subsequently, to determine potential climate scenarios for the future
- 26. The degradation of forest ecosystems reduces their ability to prevent erosion, landslides, and floods, while also increasing the risk of hydro-meteorological disasters such as seasonal floods and long-term droughts. In Donggala Regency, 98.8% of villages face a high risk of floods and 90% of villages are susceptible to severe drought. Meanwhile, in Parigi Moutong Regency, 76% of villages find themselves in situations where they are vulnerable to both floods and droughts

Donggala				Parigi Moutong			
Descrition		D	ought			D	
	Flood Risk	% R	isk	%	Flood Risk	%	Risk
Highest Risk	0	0	17	10	0	0	0
Very Risk	25	15	8	4,8	6	2,12	15
More Risk	109	65,3	118	71	121	42,8	127
Risky	31	18,6	24	14	87	30,7	72
Moderately							
Risky	2	1,2	0	0	0	0	0
Lower Risk	0	0	0	0	0	0	0
Not Risk	0	0	0	0	1	0,36	1
No Data	0	0	0	0	68	24	68
	167	100	167	100	283	100	283

Table 1. Number of Villages Classified by Flood and Drought Risk Levels in Donggala and Parigi Moutong District

27. This table illustrates the intensity of flood and landslide disasters across 14 districts, where the targeted villages for project implementation are located. There were 210 flood and landslide incidents in the past—year, from 2020 to 2021, occurring in 14 districts located on the western coast of Donggala Regency, with 137 cases reported in this area. Additionally, there were 73 cases reported in parts of the eastern coast of Parigi Moutong Regency.

Disaster Location		Disaster Intensity Type of Disasters				
		District	Sub-district	2020		2021
Donggala	Balaesang	2	2	2		
Donggala	Labuan			1		
Donggala	Sindue	2	1	2		
Donggala	Sindue Tambusambora			12		
Donggala	sirene			1		
Donggala	Sojol	4 1		4 4		
Donggala	Sojol Utara	2		4		
Parigi Moutong	Tomini	2		3		
Parigi Moutong	Mautong			2		
Parigi Moutong	Mepanga	2		2		
Parigi Moutong	Ongka Malino	9	1	2 1		
Parigi Moutong	Palasa			1		
Parigi Moutong	Tinombo	6		11		
		66	4	106		

Tabel 2. Disaster Intensity by Type at Project Location

28. The data reveals that in the span of 2 years (2020-2021), flood disasters have increased by 62%, while landslide incidents have risen by 12%. The impact of climate change is further evident in the reduced productivity of agricultural lands, specifically in crops such as coconut, cocoa, and coffee. Of significant concern is the diminishing water resources available for consumption over the past several years. Overall, climate change has had a profound impact on the lives of the population, affecting various aspects including the economy, society, and health

1.1.3. Social and Economic Context

29. The population in both districts has been steadily increasing over the years, paralleled by a concurrent rise in the number of individuals living in poverty. Table 3 shows this trend consistently from 2012 to 2019, with a decrease in poverty only in the year 2020

	Donggala Distr	rict	Parigi Moutong	District
Year	People (x thousands)	Poor People (x thousands)	People (x thousands)	Poor People (x thousands)
2012	284.1	48.4	428.36	75.44
2013	287.9	49.6	441.02	75.46
2014	290.9	47.56	449.16	75.48
2015	293.7	54.17	457.71	82.61
2016	296.4	55.69	465.88	82.38
2017	261.9	54.44	474.34	82,88
2018	265	54.28	482.79	83.66
2019	300	55.83	490,92	81.36
2020	300,4	53.17	440.02	78.76
2021	302,97	51.23	443.17	76,79

Table 3. Population of Donggala and Parigi Moutong Districts

Source: Central Bureau of Statistics (BPS) Kab. Donggala, 2012 - 2022 Central Bureau of Statistics (BPS) Kab. Parigi Moutong, 2012 – 2022

- 30. The population in both regencies heavily relies on terrestrial and marine ecosystems for their livelihoods. According to the latest data, more than 59% of the population is engaged in agriculture, 30% work as fishermen, and the remaining portion is employed in trade and formal sectors. Within the agricultural sector, the majority of people are involved in plantation farming. Food crop cultivation is limited in scale due to the rugged topography, which doesn't provide enough suitable land for extensive rice paddies. However, there is an exception for the Lauje ethnic group residing in the mountains. They collectively cultivate food crops and plantations on separate plots of land. The Lauje people grow rice, corn, and vegetables in shifting cultivation. As stated by Rosita (2017), the Lauje community has increasingly shifted towards plantation farming due to declining agricultural yields and the diminishing availability of arable land.
- 31. Being a coastal region, the residents of this area primarily cultivate coconut as their flagship commodity. Additionally, they also engage in the cultivation of cloves, which are tolerant to sea winds, as well as cocoa, coffee, black pepper, and nutmeg. Climate change has led to a significant decline in the production and productivity of these plantations. Based on the

analysis of production data for the main commodities - coconut, cocoa, cloves, and coffee - on the West Coast, coconut production has decreased by 60% since 2017, with the total production dropping from 33,151 tons to 13,328 tons in 2020. On the East Coast, coconut production experienced a 17% decline, decreasing from 9,362 tons to 7,694 tons. A 38% decrease also occurred in cocoa production on the West Coast, falling from 16,431 tons to 10,051 tons. A similar trend was observed on the East Coast, where cocoa production decreased by 24%, from 5,662 tons to 4,271 tons. Clove production saw a 20% decline on the East Coast, dropping from 751 tons to 599 tons, while there was no available data on clove production on the West Coast in 2020. The only commodity that showed an increase was coffee, which rose by 60% from 73 tons to 117 tons on the West Coast. However, on the East Coast, coffee production had already decreased from 38 tons to 21 tons. (Figure 8).



Figure 8. Development of Production of 4 Main Commodities on the East Coast and West Coast

- 32. The expansion of agricultural land signifies efforts towards agricultural extensification. This is done to maintain production levels, either through the same commodities or by seeking new ones, especially short-term crops such as maize, patchouli, and legumes. Another notable alternative is the development of aquaculture, including shrimp and milkfish ponds. This is evident from the significant increase in pond area, which rose by 700% on the West Coast and 879% on the East Coast. However, the expansion of aquaculture areas has resulted in massive mangrove conversion, impacting the livelihoods of small-scale fishermen who rely on reef fish that have a life cycle associated with the mangrove ecosystem. The opening of mangrove forests has also eliminated their function as sediment traps. As a result, sediments have spread, covering coral reefs and causing coral bleaching. This is made worse by the continued practice of blast fishing which damages coral structures. High-resolution satellite image analysis indicates that coral bleaching has occurred along the coasts of Balaesang, Tanjung, Tomini, and South Tinombo. The degradation of coral reefs will have a direct impact on the livelihoods of small-scale fishermen who depend on reef fish (demersal). These fishermen use rowboats or small 5 HP engine- powered boats, resulting in limited mobility. This issue also affects women in fishing communities, whether as fishermen's wives or female heads of households. In fishing communities, every woman is actively involved in fishing activities, including post-catch processing, managing fisheries by-products, and fishing itself. Therefore, the degradation of mangroves and coral reef ecosystems will directly impact both small-scale fishermen and women.
- 33. The socio-economic conditions prevailing in this region have led to a higher percentage of the population living in poverty in 2021 compared to 2012. The impacts of climate change have affected the livelihoods of the population and have hindered efforts to improve well-being in both regencies. The average income is below \$30 (IDR 500,000) per capita per month, affecting 50,686 individuals (16.73%) in Donggala Regency and 67,716 individuals (15.28%) in Parigi Moutong Regency.

- 34. The demographic distribution of the population in the Neck of Sulawesi Ecoregion is divided into two regions: the highlands and the coast. The highland areas on the East Coast are inhabited by the Lauje ethnic group, while on the West Coast, Topo Unde, To Kaili, and To (people of) Balaesang have integrated with incoming communities from various places, such as To Kulawi, the Minahasa people, Toraja, and Bugis. A similar situation is observed on the East Coast, although the number of migrants is relatively smaller.
- 35. The geographical conditions in the Neck of Sulawesi Ecoregion are distinct from other areas, where the highlands and lowlands, including the coastal areas, form a unified natural landscape bounded by the same hilly ridge. The physical distance between the highlands and lowlands is relatively close, with clear regional divisions. The Lauje ethnic group resides in the mountain peaks, which they consider their territory, while the To Kaili, Topo Inde, and others live on the slopes, valleys, and foothills of the mountains, directly adjacent to the sea. In terms of accessibility, the Lauje community is relatively disadvantaged and marginalized compared to the coastal population. Hence, the concept of the Highlands cannot be solely understood from a geophysical perspective; it also needs to be comprehended in the social-political dimension. In this context, the social aspect of this understanding is synonymous with the term "terpencil" (remote) referring to a place that is "geophysically" separated from other areas in the lowlands. Meanwhile, the political aspect is more akin to the term "pedalaman" (interior), which is frequently used in Indonesia to describe regions that are far from the central government (Li, 2002).
- 36. The people in this region have a tradition of mutual cooperation and collective work. This tradition is expressed through several different tribal languages: Mosiala Mplae, Sintuwu, all of which share the same meaning of a labor exchange system in managing agricultural land and other economic resources. The Lauje ethnic group adheres to a land-use concept that is still practiced today. They classify land based on land cover, topography, and land position, starting from the central settlement, and categorize it as follows:
 - Pangale is an area that should not be cultivated due to its location in high and steep terrain. This region has a high biodiversity and should be protected. They believe that this area is inhabited by ancestral spirits, a belief that is deeply respected and passed down through generations by the Lauje community.
 - 2. Jurame/ulate is a space commonly managed by the community as agricultural fields, particularly for rice, sweet potatoes, and maize, using shifting cultivation practices.
 - 3. Pinojo'ong/jo'ong is the area where agricultural commodities are grown. To distinguish it from Jurame/Ulate, Pinojo'ong/Jo'ong is predominantly planted with cash crops like cloves, coconuts and cocoa.
- 37. The traditional land use practices of the Lauje Indigenous community represent a local wisdom tradition that serves as a form of social capital. This social capital can be revitalized and implemented as a participatory and sustainable natural resource management approach in the modern era. Integrating social capital into sustainable land management systems can be achieved through a succession of agroforestry development schemes, green farming practices, and institutional frameworks. These efforts are expected to accelerate economic growth while preserving environmental stability, thereby enhancing the potential for climate change adaptation.

Of the 15 target villages, 9 of them are villages inhabited by a majority of indigenous tribes, while the other 6 villages are relatively heterogeneous. Of the 9 villages dominated by Indigenous tribes, 7 villages still maintain their identity, ways of life, and traditional values, and some of them even still call themselves Indigenous people;

These villages are; 1). Rano Village, Balaesang Tribe; 2). Manimbaya Village, Balaesang Tribe; 3). Pomolulu Village, Bajo Tribe; 4). West Lombok Village - Lauje Tribe; 5). Pebounang Village, Lauje Tribe 6). Dusunan Village, Lauje Tribe and 7). West Bolano Village (Bolano/Boano).

In addition, in Labuan Toposo village, there is the Kaili indigenous community. However, in this village, they have become a minority. In addition to being smaller in number than migrants, they also live separately and are concentrated in one hamlet. They are less mingled with other communities. And live in a different way by maintaining their customary norms.

Indigenous community beneficiaries in the following table:

No) fill and a	Indigenous	Direct Bene	Direct Beneficiary (IP)		Intervention
IVIO	Villages	People	Men	Women	Total Benef	Intervention
	Pomolulu	Вајо	35	50	85	ProKlim Proposed, Mangrove Restoration, Coral Transplatation, Aquaculture, Climate Field School, Economic Development and Village engagement
2	Rano	Manimbaya	40	30	70	Social Forestry (SF) Post Permit , Lake Protection, Proklim Proposed, Maping and Strengtening Indigeounus Institutional, Econimic develpoment, Climate Field School
3	Manimbaya	Manimbaya	30	50	80	SF Post Permit Strengthenig, Proklim Proposed, Maping Teritory, Strengtening Indigeounus Institution, MAP, Econimic development, coral transplation, Mangrove restoration, Indigeounus Institutional, Village Governance, Climate Field School
4	Pebounang	Lauje	30	40	70	SF and Proklim Proposed, Maping and Strengtening Indigeounus Institution, Economic Development, MAP, sustainable fhisering, coral transplation, Mangrove restoration, Indigeounus Institutional, Village Governance, Climate Field School
5	Bolano Barat	Bolao	30	40	70	SF and ProKlim Proposed, Economic Development (Aquaculture), Climate Field School, Village engagement, land and Forest Restoration
6	Lombok barat	Lauje	30	35	65	FS and Proklim Proposed, Maping and Strengtening Indigeounus Institution, Indigeounus Institutional, Village Governance, economic development, agroforestry
7	Dusunan	Lauje	25	35	60	FS and ProKlim, Mangrove Restoration, Coral Transplatation, ProKlim Proposed, Aquaculture, MPA, Climate Field School, Economic Development and Village engagement
8	Labuan Toposo	Kaili	10	10	20	SF and ProKlim Proposed, Economic Development (Agriculture) Climate Field School, Village engagement, land and Forest Restoration, Eco Tourisme (bird watcing) development
			230	290	520	

Table 4. Indigenous People Beneficiary

The total customary beneficiaries are 520, 230 Males and 290 Females. The proportion of customary beneficiaries of all beneficiaries is **49.8%**.

1.1.4. Project/Program Context

38. In order to contribute to reducing global temperatures and mitigating the risks of climate change impacts, the Indonesian government has ratified the Paris Agreement through Law No. 16 of 2016 on the Ratification of the Paris Agreement under the United Nations Framework Convention on Climate Change. Additionally, the Ministry of Environment and Forestry has issued Ministerial Regulation No. 33/MENLHK/SETJEN/KUM.1/3/2016 providing guidelines for climate change adaptation preparation. In 2021, Indonesia will release its NDC (National Determined Contribution) outlined in Presidential Regulation No. 98 of 2021 on the

- Implementation of Carbon Economic Value to Achieve National Contribution Targets and Greenhouse Gas Emission Control in National Development.
- 39. As an archipelagic country with extensive coastal areas, islands, and small islands traversed by the equator, Indonesia is the most vulnerable country to climate change. Risk reduction from climate change impacts can be achieved through adaptation scenarios. Climate change adaptation is an effort made to enhance the ability to adapt to the impacts of climate change, including climate variability and extreme events. This helps reduce the potential damage caused by climate change, capitalize on the opportunities presented by climate change, and mitigate its consequences.
- 40. The Sulawesi Neck Ecoregion is the most vulnerable landscape to climate change due to its geophysical characteristics, being surrounded by two marine systems and crossed by the equator. This situation results in unpredictable and constantly changing weather patterns, often characterized by extreme conditions. Annual rainfall data indicates a decreasing trend in precipitation, which is directly proportional to the increasing surface temperatures. This trend leads to reduced water discharge and the disappearance of surface water sources in the region. Despite the decrease in rainfall, data shows that the intensity of floods and landslides has actually increased in the past two years. These events are related to reduced rainfall intensity but with high water discharge scales and prolonged durations. In addition to the direct losses and suffering experienced by the population in this ecoregion due to hydrometeorological disasters, they also face increasing socio-economic pressures resulting from declining incomes due to the significant decrease in the production of various commodities. The expansion of ecological damage activities contributes to increased degradation of coastal ecosystems, including coral reefs. The resulting damage threatens the sustainability of aquatic organisms and the livelihoods of small-scale fishermen who depend on demersal fisheries.
- 41. The program design is developed to address these issues while considering the alignment with the adaptation contribution targets outlined in the NDC document specified in Presidential Regulation No. 98 of 2021. The interconnection, suitability, and contributions of each component to the main program are elaborated in the table below:

No	Componen	Program Key	Contribution
1	Strengthening the adaptive capacity of village-based communities, through the realization of ProKlim villages	 Strengthening Adaptation Capacity Strengthening community capacity and participation in planning. 	Social Security and Livelihoods
2	Improving the ecosystem through strengthening social forestry, rehabilitating critical areas, and establishing new protected areas, regional governments in structuring, expanding and establishing new protected areas.	 Protection of coastal areas Social Forestry Reducing deforestation and degradation Ecosystem Conservation and Restoration 	Ecosystem and landscape resilience
3	Increasing social and economic resilience by improving the livelihoods of the poor, women and vulnerable groups.	 Sustainable Plantation Agriculture Soil Conservation Ecosystem Conservation and Restoration 	Economic Resilience Ecosystem and landscape resilience
4	Provision of regional policies and instruments to strengthen	- Strengthening Adaptation Capacity	- Social Security and Livelihoods

program sustainability Preparedness		adaptation actions and ensure program sustainability	- Strengthening Disaster Preparedness	
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Table 4. Relationship of Program Components with Main Programs and National Adaptation Contributions

- 42. Community involvement in climate adaptation needs to be increased as it currently falls within the moderate range (ZO et al., 2022). This project has the potential to reinforce climate village programs, aligning with the provisions outlined in the Minister of Environment and Forestry Regulation No. P.84/MENLHK.SETJEN/KUM.1/11/2016. The Climate Village Program (ProKlim) is a national initiative with the primary goal of enhancing community and stakeholder engagement to bolster adaptation capacity to climate change. Additionally, it aims to reduce greenhouse gas emissions and acknowledge local efforts in climate adaptation and mitigation, ultimately leading to improved local well-being tailored to regional conditions (Ministry of Environment and Forestry, 2016). Empowering communities and fostering collaboration with stakeholders are two key strategies to enhance ProKlim's performance at the local level, as highlighted in previous studies (Faedlulloh et al., 2019; Ramdani & Resnawaty, 2020).
- 43. This project also complies with and supports the Central Sulawesi Regional Regulation of 2013 regarding the Spatial Planning of Central Sulawesi Province for the years 2013-2033. This regulation emphasizes the importance of environmentally-conscious spatial structure and patterns (Regional Regulation, 2013). Furthermore, environmental issues are reiterated in Regional Regulation Number 5 of 2021, which focuses on optimizing environmental services for the well-being of the community (Regional Regulation, 2021).
- 44. If this adaptation program is not implemented, there will be no efforts to enhance community adaptation in the Neck of Sulawesi Eco-region. The implications of this scenario are as follows: ecological damage to the forest will continue to escalate, and even the mangrove ecosystem may become extinct by 2065; temperatures could rise by 1.85°C 2.85°C by 2035. Consequently, the population in the Leher Sulawesi eco-region will be increasingly affected, especially those living below the poverty line. The cost of disaster recovery resulting from mangrove damage is a hundred times greater than conservation efforts (Cruz, 2022). Therefore, the implementation of this program is crucial as it directly relates to the future of the community and its ecosystem, as well as the strengthening of institutions, collectively contributing to enhancing community resilience and adaptation capabilities.

Project/Program Objectives:

- 45. The main objective of this program is to enhance the effectiveness and capacity of rural communities to adapt to the impacts of climate change in the Neck of Sulawesi Ecoregion, Central Sulawesi Province. This program is a critical and time-sensitive initiative aimed at preventing more significant future losses and damages resulting from ongoing climate change. The program comprises several key areas of focus:
 - 1) Increase in village access through the establishment of ProKlim villages
 - 2) Increase knowledge and circulation of information on climate adaptation

- 3) Better management of social forestry in the neck of Sulawesi
- 4) Sustainable of Marine Protected Area (MPA)
- 5) Environmental functions in critical land zones restored
- 6) Increase micro/small businesses with adaptive innovation
- 7) The availability of climate change adaptation policies at the district level monitored by the Climate Change Working Group, officially supported by the district government

No	Project / Programme Components	Expected Outcomes	Expec	ted Concrete Outputs	Amount (US\$)
1	Improving acces to resources for sustainable climate change adaptation at the village level.	Outcome 1.1. Increase in village access through the establishment of ProKlim villages	1.1.1. 1.1.2. 1.1.3.	Stakeholder's commitment for ProKlim village Village policies related to climate change adaptation plans and ProKlim groups are stablished Proposed pro-climate villages in Donggala and Parigi Moutong Districts	204,958
		Outcome 1.2 Increasing the circulation of knowledge about climate adaptation and information circulation	1.2.1.	Increased access to knowledge and information on environmental conditions through cadre training in 15 villages	38.802
2	Environmental improvement through strengthening social forestry, rehabilitating critical areas, and proposing the	Outcome 2.1. Strengthening community access through social forestry and Expansion of terrestrial protected areas/zones in the neck ecoregion	2.1.1.	Increase access to social forestry and revitalization of Social Forestry access holders Zoning of PS (Social Forestry) areas	72.509
	establishment of new protected areas.	Outcome 2.2. Determination of 2 coastal protected areas by local governments in the form of DPL and/or Preserved Area	2.2.1.	Identification and zoning of Marine Protected Areas (MPA) and/or Preserved Area around the Makassar Strait and Tomini Bay Drafted local regulations regarding Marine Protected Areas (MPA) and/or Preserved Area around the Makassar Strait and Tomini Bay	21,868
		Outcome 2.3. Rehabilitation of critical land in the PS working area with MPTS (Multi Purposes Tree Species)	2.3.1.	Rehabilitation of critical lands in PS areas with MPTS (Multi-Purpos Tree Species) Increased land cover rehabilitation through mangrove involvement of women's groups	175,807
3	Social and	Outcome 3.1.	2.3.3. 3.1.1.	Rehabilitation of critical lands in coral reef areas Development of small-	215,166

4	Provision of instruments and regional policies aimed at reinforcing adaptation efforts and securing the long-term sustainability of the program	The development of micro/small businesses that are adaptive innovation Outcome 4.1. Development of Climate Change institutions and actions in Donggala and Parigi Moutong districts	3.1.2. 3.1.3. 4.1.1. 4.1.2.	able to utilize adaptive knowledge and technology in fishing and aquaculture Establishment of Climate Change Working Group in Donggala and Parigi Moutong districts Availability of the Climate Change Action Plan (RAD PI) for Donggala and Parigi Moutong Districts	104,346
	Total Project / Programmo				833,456 87,490
	Project / Programme Exe				,
Project / Programme Cycle Management Fee charged by the Implementing Entity (if applicable) Amount of Financing Requested					78,280 999,226

Table 5. Components and Financing of Projects/Programs

46. The scope of the project is proportional based on funding. Although it consists of many topics, between one topic and another are interrelated and influence each other, because they occur in one landscape. Which is possible because of the unique shape of the Sulawesi neck landscape, including mountains extending from north to south and flanked by the sea in the west and east. So, a village or sub-district can have both forest and sea areas.

Thus, the community's life system will also be influenced by the two ecosystems, including in terms of livelihoods. In one village, there are residents who work as fishermen, and there are also farmers. Many work as farmers and fishermen at the same time. So, rather than partially, we decided to approach this condition from a landscape perspective.

In addition to agriculture - forestry (agroforestry), and fisheries, the development of microsmall businesses will also be related to local resources and commodities. so that the focus of marketing, or processing businesses will be based on commodities produced by forests, agriculture, and the sea.

To ensure that project costs are focused on concrete adaptation actions, not just planning, can be assessed from the budget posture in the budget plan, which shows a larger allocation of costs for concrete adaptation actions. The total allocation of program costs is, 833,456, US\$, 79.35% is allocated for Concrete Adaptation Actions, and 20.65% is activities related to planning.

However, the planning activities carried out are planning activities that are prerequisites for carrying out Adaptation Actions. As regulated in government regulations. For example, Social Forestry Planning, in the form of RKPS and RKT PS documents, are documents that must be provided by the Social Forestry Management Institution after granting a permit, according to

the Minister of Environment and Forestry Regulation No. 9 of 2021. So that it becomes a requirement that must be provided by the village, before carrying out concrete adaptation actions in the Social Forestry Area.

Planning at the Regency level in the form of RAD API (Regional Action Plan for Climate Change Adaptation), although the product is a planning document, this should also be assessed as a concrete adaptation action from a policy aspect. With this document, the district-level government will have a basis (conceptual and legal) for allocating government budgets and activities related to strengthening adaptation in the future.

Projected Calendar:

Historical Milestone	Expected Date
Star of Project/Program Implementation	April 2025
Mid-Term Review (if planned)	May 2025, August 2025, November 2025, February 2026, March 2026, June 2026, September 2026, January 2026, March 2026
Project/Program Closure	March 2027
Terminal Evaluation	April 2027

Table 6. Project Calendar

PART II: PROJECT/PROGRAMME JUSTIFICATION

A. Project Component

- **Component 1:** Improving access to resources for sustainable climate change adaptation at the village level.
- 46. Consists of 2 outcomes, Outcome 1.1. Increase in village access through the establishment of ProKlim villages, and Outcome 1.2. Increase knowledge and circulation of information on climate adaptation. Outcome 1.1. consists of 3 outputs and Outcome 1.2. consists of 1 Output, with the following description;
 - **Output 1.1.1. Stakeholders' commitment to ProKlim villages**. This output consists of activities; 1. Launching of the program at the provincial level by the Governor in Palu; 2. Program socialization at village level; 3. Mapping of program beneficiaries and building a complaint mechanism dan 4. GEDSI Training for all Program Implementers.
 - Output 1.1.2. Village Policies for Climate Change Adaptation and ProKlim Group Initiatives formulated. This output consists of activities; 1. Discussion Problem identification and Preparation Documentation; 2. Training on making village regulations; 3. Preparation of Ranperdes on ProKlim;; 4. Public consultation on Ranperdes; 5. Invitation of Ranperdes on pro-climate; 6. Facilitating the establishment of pro-climate working groups; 7. Deliberation on election of pro-climate group management; 8. FGD on the preparation of the pro-climate group work plan; 9. Facilitating the inauguration of pro-climate group management by the village head; 10. Community Organizing / Mentoring and Assistance in organizing village communities;
 - Output 1.1.3. Proposed of 100 ProKlim villages in Donggala and Parigi Moutong. This output consists of activities; 1. Training and Preparation of ProKlim Enumetars from BLH Donggala and Parimo Districts; 2. Collection adn Input of ProKlim Village Proposals in the National Registration System; 3. Communication and coordination with BPPI Sulawesi.and DLH; 4. Assistance in preparing and pro-climate village proposals; 5. Propose 100 ProKlim Villages through the national registration system for climate change control; 6. Correspondence and proposal escort
 - Outcome 2, in this component will be realized through output 1.2.1. namely; Increased knowledge of adaptation, as well as circulation of climate information. What will be achieved with the activities; 1. Development of Climate Schools in 15 villages; 2. Intensive course on aerial and underwater drone operation for Millennials, documentation of potential villages activities; 3. Millennials conduct periodic forest and coastal health monitoring; 4. Updates Periodic reports on cover changes and infographic displays on forest and coral reef health in 15 villages
- 47. Fifteen villages in the Sulawesi eco-region have been selected as target locations for a climate change program, based on their high climate vulnerability index. This index is determined by levels of exposure, sensitivity, and adaptation capacity. The low adaptive capacity in these villages is attributed to several factors: A) limited social institutions and networks, B) low technological adaptation, C) absence of climate communication tools, D) no disaster preparedness system, E) inadequate irrigation and water storage infrastructure, F) low average education levels, and G) low average monthly incomes.

- 48. Investment to strengthen community adaptation capacity in this component will focus on the following aspects: developing and strengthening village-level adaptation institutions, enhancing access to information, communication, and technology, improving disaster preparedness, providing water management facilities, and increasing social access. These aspects are selected considering the program's capacity, implementation timeline, and strategies related to fostering independent and sustainable adaptation actions. Enhancing adaptive capacity enables communities to plan and continuously implement adaptation actions using available resources at the household and village levels, including village fund budgets. Improving social access and expanding institutional relationships allows communities systematic access to resources available through local government programs. Thus, this intervention will be an investment stimulating widespread adaptation actions.
- 49. The approach framework to be used is ProKlim or the Village Climate Program. ProKlim is a program by the Ministry of Environment and Forestry to increase community and stakeholder engagement in strengthening adaptation capacity to the impacts of climate change and emission reduction, and to recognize efforts in climate change adaptation and mitigation. It aims to enhance welfare at the local level in line with regional conditions. In the 2021 NDC update, ProKlim is cited as a form of joint adaptation and mitigation at the village level, aligning with Article 13 of the Paris Agreement. The Indonesian government targets 20,000 ProKlim villages by 2024. Furthermore, achieving this component will not only increase community adaptation capacity but also contribute to Indonesia's efforts in reaching the ProKlim target.
 - **Component 2** Environmental improvement through strengthening social forestry, rehabilitating critical areas, and proposing the establishment of new protected areas.
- 50. Consists of 3 outcomes; Outcome 2.1. Better management of social forestry in the neck of Sulawesi; Outcome 2.2; Sustainable of Marine Protected Area (MPA); Outcome 2.3. Environmental Functions in critical land zones restored;
 - Outcome 2.1. will be achieved through the following outputs and activities;
 - Output 2.1.1. Increases access to social forestry and revitalization of Social Forestry access holders. This output consists of activities; 1. Workshop on Social Forestry Revitalization in 6 permit holders and 2 prospective permit holders; 2. Facilitating the acceleration of issuance of permits for 2 new social forestry areas; 3. Facilitate the preparation of the RKPS (Social Forestry Work Plan) and RKT PS (Annual Work Plan on Social Forestry) documents with climate change adaptation orientation for 8 permit holders; 4. Arrangement of Social Forestry block area in 6 existing social forestry; 5. Community Organizing / Mentoring and Assistance in organizing village communities.
- 51. Increasing access which in this case is the granting/acquisition of a bundle of rights for the community so that they can legally manage forest resources. With increased access, communities that were initially not allowed/prohibited from managing forests, are now legally permitted.
 - Increasing access is beneficial; 1). Resolving conflicts over forest control and management between the community and the government, while providing legal certainty to communities around the forest. 2). Improving the community's economy through natural assets such as wood and non-wood (for example, honey, rattan, coffee) and management of tourism services, water, and energy; 3). Increasing community participation as well as the capacity for forest protection and rehabilitation. The granting/increasing of access is carried out through Social Forestry permits by the government, which consist of 3 schemes: Village Forests, Community Forests, and Community Plantation Forests.

Output 2.1.2. Social Forestry Zoning Arrangement,

This output consists of **activities**; 1. Participatory field tracking of new protection zones within the Social Forestry area and Outside the Social Forestry area; 2. Workshop on integration of utilization blocks, land use plans with detailed village spatial plans; 3. New protection zone delineation; 4. Arrangement of Social Forestry block area in 6 existing social forestry; 5. Community Organizing / Mentoring and Assistance in organizing village communities;

Outcome 2.2. is: Sustainable of Marine Protected Area (MPA). Consists of 2 outputs as follows;

Output 2.2.1. Identication and zoning of sea protection area - Field identification, - Village consultation; with activities; 1. Field tracking of potential areas Zoning Map of Marine Protected Areas (DPL) and/or Reserved area around the Makassar Strait Coast and Tomini Bay; 2. Zoning of Marine Protected Areas (DPL) and/or Reserved area the Makassar Strait Coast and Tomini Bay; 3. Preparation of academic studies of Marine Protected Areas (DPL) and/or Reserved area around the Makassar Strait Coast and Tomini Bay.

Output 2.2.2. Drafting of local regulation regarding Marine protected areas (MPAs) and / or Reserved area around the Makassar straigt and Tomini bay coasts, with activity; 1. Preparation of Draft Regional Regulation on Marine Protected Areas (DPL) and/or Reserved area around the Makassar Strait Coast and Tomini Bay; 2. Zoning of Marine Protected Areas (DPL) and/or Reserved area around the Makassar Strait Coast and Tomini Bay; 3. Preparation of academic studies of Marine Protected Areas (DPL) and/or Reserved area around the Makassar Strait Coast and Tomini Bay;

Outcome 2.3. is Environmental Functions in critical land zones restored. Consists of 2 outputs as follows;

Output 2.3.1. Rehabilitation of critical land in the PS working area with MPTS (Multi Purposes Tree Species), with activity; 1. MPTS nursery training for the ProKlim Group; 2. Village nursery development in 11 villages; 3. Nursery of 110,000 MPTS seedlings at the Village Nursery; 4. Planting 110.00 seedlings in critical areas using the successful agroforestry method; Output 2.3.2. Increased mangrove rehabilitation area through womens group involvement. will be achieved through activities; 1. Field School of Mangrove Seedling and Cultivation Techniques for women in 13 villages; 2. Mangrove Nurseries by women in 13 villages; 3. Mangrove planting by women in 13 villages x 10 Ha (130 ha); 4. Monitoring and maintenance of mangroves by women in 13 villages.

Output 2.3.3. Rehabilitation of critical land in coral reef area; will be achieved through activities, 1. Field School for making and cultivating corals *Bioreeftek* Method for young fishermen; 2. Facilitate the manufacture of bioreeftech media; 3. Placement of bioreeftech media on coasts and coral reefs that need to be restored; 4. Facilitate monitoring and reporting on coral reef development;

Outcome 2.3. Environmental Functions in critical land zones restored. This outcome will be achieved with the following outputs and activities;

Output 2.3.1. Rehabilitation of critical land in the PS working area with MPTS (Multi Purposes Tree Species); 1. MPTS nursery training for the ProKlim Group; 2. Village nursery development in 11 villages 3. Nursery of 110,000 MPTS seedlings at the Village Nursery; 4. Planting 110.00 seedlings in critical areas using the successful agroforestry method;

Output 2.3.2. Increased mangrove rehabilitation area through womens group

involvement; 1. Field School of Mangrove Seedling and Cultivation Techniques for women in 13 villages; 2. Mangrove Nurseries by women in 13 villages; 3. Mangrove planting by women in 13 villages x 10 Ha (130 ha); 4. Monitoring and maintenance of mangroves by women in 13 villages

- **Output 2.3.3. Rehabilitation of critical land in coral reef area**; 1. Field School for making and cultivating corals *Bioreeftek* Method for young fishermen; 2. Facilitate the manufacture of bioreeftech media; 3. Placement of bioreeftech media on coasts and coral reefs that need to be restored.; 4. Facilitate monitoring and reporting on coral reef development.
- 52. This component encompasses a set of adaptation actions that will contribute to ecosystem and landscape resilience. Given that the primary livelihood sources for the community are agriculture and fisheries, the outcomes of this component will also enhance social security and livelihoods. These resilience aspects are part of the national adaptation action contributions outlined in the 2021 NDC update. Over time, the degradation of forests, mangrove ecosystems, and coral reefs has led to increasing ecological and economic impacts, with heightened risk levels. Significant changes in weather patterns increase threats like floods, landslides, droughts, and maritime transport accidents (for fishermen), exacerbated by the reduced carrying capacity of ecosystems and disrupted livelihoods.

Improvements and enhanced protection of ecosystems will be carried out from the highlands to the coastal areas, tailored to the landscape of Sulawesi. Ecosystem restoration will involve Social Forestry and the rehabilitation of three types of ecosystems: forests, mangroves, and coral reefs. A key aspect of rehabilitation across these different ecosystems is prioritizing community participation. This approach marks a fundamental difference from government-led rehabilitation projects, which primarily involve third- party contractors.

- 53. In the rehabilitation activities, women's roles will be prioritized in the development and rehabilitation of mangroves. Coral reef cultivation will be carried out by youth fishing groups (both males and females), while forest rehabilitation will involve mixed-gender ProKlim groups. This gender and age group variation is a deliberate design, considering various tendencies and suitability, as well as effectiveness. Rehabilitation activities include seed provision, planting, and maintenance. Seed provision for both forest rehabilitation (using multi-purpose tree species) and mangrove will be community-led through village nursery systems. Although seed provision is community-managed, the consortium will take technical responsibility to ensure successful breeding, including training in cultivation and breeding, and providing technical assistance for planting and maintenance stages.
- 54. The *Bioreeftek* method for coral reef cultivation is a new idea for this region, previously implemented by consortium members on Kabalutan Island, Togean Islands. Developed by the Ministry of Marine Affairs and Fisheries' Marine Research and Observation Center since 2008, *Bioreeftek* uses coconut shells as a substrate for attaching coral planula larvae for natural development. This method is chosen due to the abundance of coconut trees in the coastal areas of Sulawesi. It is simple, easy-to-make construction that makes it efficient and affordable for communities. *Bioreeftek* recruits coral planula larvae naturally, making it less damaging than conventional methods. This affordability and simplicity transform coral cultivation into an accessible activity for fishermen, moving it away from being an "elite" activity requiring expensive and complex techniques.
- 55. These approaches ensure the transfer of knowledge, aiming to preserve the tradition of ecosystem rehabilitation and restoration. Moreover, this process empowers communities or villages to carry out rehabilitation independently, including meeting the village rehabilitation targets, which will be calculated and established by the villages as part of their village adaptation policy, developed during the previous component (Component 1)

56. In addition to rehabilitation efforts, this program will initiate the establishment of new protected areas. This is aimed at reducing the rate of degradation, particularly in areas of high ecological value. Based on the Central Sulawesi Forest Area status and function map, the protected areas in the Sulawesi neck ecoregion only cover 1.8% of the total area. This leaves nearly the entire region, both land and water, accessible without protection. As a result, the sustainability of ecosystem functions becomes highly vulnerable and uncertain. This situation calls for increased conservation efforts through the initiation of legally and institutionally recognized new protected areas. The designation of these new protected areas aims to expand the availability of protected areas in the region, taking into account the jurisdictional division between local and village governments. Therefore, new protected areas are designated in three ways: 1) Setting up Protected Zones to be designated within the boundaries of Social Forestry working areas 2) The designation of local protected areas within customary forests, customary lands, village lands, or traditional lands based on traditional wisdom, voluntary actions, and village autonomy. 3) Schemes for Marine Protected Areas and/or Preserved Area, with the designation made by regional governments. Hence, the sustainability of Component 2 is guaranteed by the government, as the establishment of new protected areas (Preserved Area /DPL) is based on regional regulations. These regulations govern the provisions of costs arising from government decisions as government obligations.

Component 3 Social and economic resilience through livelihood improvement

- 57. Consists of 1 outcomes: Increase micro/small businesses with adaptive innovation, will be achieve with 3 output;
 - **Output 3.1.1. Development of small businesses eith adaptive capacity;** 1. Training and assessment of sustainable livelihood assets; 2. Business development studies, investment plans and marketing of climate adaptation innovation products; 3. Workshop on business development plans, investment plans and marketing plans for climate adaptation innovation products; 4. Community Organizing / Mentoring and Assistance in organizing village communities;
 - Output 3.1.2. Development of successional agroforestry as a suistanable land use alternative; 1. Sectional agroforestry system training; 2. Support for successional agroforestry development, and; 3. Community Organizing / Mentoring and Assistance in organizing village communities
 - Output 3.1.3. Small-scale fishermen able to utilize adaptive knowledge and technology in fishing and aquaculture. 1. There is a small-scale demersal fishery profile document; 2. Assistance with fishing gear for small-scale demersal fishermen; 3. Provision of fishfinder technology for fishermen; 4. Karamba/mangrove crab aquaculture training; 5. Support for the implementation of aquaculture; 6. Community Organizing / Mentoring and Assistance in organizing village communities.
- 58. Improving community livelihoods will be a part of the implementation of adaptation actions aimed at reducing the vulnerability of poor households, especially those in the most vulnerable categories. These include households headed by women, households with disabled members, elderly households, and extremely poor households. This focus is necessary because the livelihood sector significantly influences household vulnerability. It's recognized that the vulnerability of households to climate change varies from one area to another, even with the same level of exposure. Vulnerable households face significantly higher risks compared to non-vulnerable ones. In the context of Central Sulawesi Province, this component is urgent, considering the target households for the program are those that have experienced livelihood

disruptions or losses since 2018 due to the Earthquake, Tsunami, and Liquefaction disasters. The post-disaster recovery process has not been effective due to the pressures of the COVID-19 pandemic. Therefore, this program will invest in enhancing the livelihoods of vulnerable groups, aiming to increase the income levels of target households by 50% from the baseline by the end of the program

- 59. Investment for livelihood improvement will be focused on three sectors: Agriculture, Small-Scale Demersal Fisheries (SSF), and Micro, Small and Medium Enterprises (MSMEs). The program support will include enhancing business capacities, management and marketing skills, and providing tailored packages of financial aid and production equipment based on needs analysis. The determination of beneficiaries will be crucial for the effectiveness of this component. Beneficiary selection will be based on government data sources, especially the Integrated Social Welfare Data (DTKS), which includes not only poverty figures but also the vulnerability status of households. However, final beneficiary determination will still rely on social mapping, involving compiling lists with village governments, physical field identification, and community engagement forums. To increase accountability and transparency in the beneficiary selection process, the program implementers will publicly display a list of potential beneficiaries. Furthermore, to manage community feedback and complaints, the program management will establish a feedback and complaints mechanism, applicable for this stage and the overall program implementation.
- 60. Distribution of financial assistance provided is a Stimulant, for business capital purposes, which is intended for households who have an interest and ability in business but do not have the capital to start a business. The use of Capital Assistance by Right Holders must be spent in accordance with the business plan that has been prepared.

Requirements for Recipients of Capital Assistance must refer to the affirmative principles of vulnerable groups, and be fair;

- a. Groups of Poor Households included in the DTKS and Extreme Poor lists with:
 - 1. Category I: Extreme Poor Households, Female Heads of Households, and People with Disabilities.
 - 2. Category II: Extremely Poor Elderly Households
 - 3. Category III: Extremely Poor Households
 - 4. Category IV: Not Extremely Poor but Registered in DTKS, Female Heads of Households, People with Disabilities, Youth (especially teenage girls)
 - 5. Category V: Not Extremely Poor but Registered in DTKS, Youth
 - 6. Note: Distribution of assistance will be prioritized based on Categories I, II, and III ... Further categories will only receive assistance if there is excess budget allocation from the previous category.
- b. Have participated in business capacity building, have a business plan, and are willing to participate in business incubation (to ensure that Right Holders have business interests, business orientation, and development)
- c. Right Holder is a business group, which has Minutes of Group Formation, Group Formation Decree, Group Management, Group Statutes, and Group Bank Account (because the payment of capital assistance is in non-cash (bank transfer) d. The list of beneficiaries is verified, consulted, and agreed upon by the parties in the village; village government, BPD, Community Leaders (including women), and published in the village office.

- 61. To ensure the effectiveness in achieving targets, targeted beneficiaries will receive various supports to enhance their knowledge and technical and managerial skills, through training, courses, field schools, and technical assistance in the form of mentoring. This technical support provides a methodological distinction between the design of this program and other social assistance projects. The target group for this program likely includes those who have previously received social assistance through government stimulus programs distributed in the form of Unconditional Temporary Cash Assistance (BLT) during the COVID-19 pandemic. However, the form and purpose of this assistance are not the same. The BLT program, designed to maintain household consumption capacity, is different from this program, which aims to enhance production capacities.
- 62. To ensure the sustainability of Component 3 achievements, women's enterprises and vulnerable community groups will be organized into active and operational business groups through this program, which will facilitate both personal and institutional capacity building. One effort to strengthen small business groups is by facilitating the issuance of various business and trade permits enforced by the government. Additionally, these business groups will register their existence with relevant government departments/offices such as the Department of Agriculture, the Department of Marine and Fisheries, the Department of Cooperatives, and the Department of Micro Enterprises. Registration will open access for these groups to future government programs and assistance. Furthermore, this program will link these business groups with relevant markets and the private sector, thereby opening up wider business networks and enabling these groups to continue growing and developing. To ensure sustained support and advocacy for vulnerable groups in each village, this program will facilitate the transformation of 15 target villages into inclusive villages. An inclusive village is a governance model that accommodates the rights of all individuals, affirms vulnerable citizens (people with disabilities, the elderly, female heads of households), and involves active, open community participation, respecting diversity, and eliminating existing barriers. In Indonesia, the accompaniment of inclusive villages is carried out in accordance with the guidelines issued by the Director General of Village Development and Empowerment, Ministry of Villages, Development of Disadvantaged Regions, and Transmigration of the Republic of Indonesia.

Component 4 Provision of instruments and regional policies aimed at reinforcing adaptation efforts and securing the long-term sustainability of the program

- 63. **Component 4, consists of outcomes**: The availability of climate change adaptation policies at the district level monitored by the Climate Change Working Group, officially supported by the district government, **will be achieve with 3 output**;
 - Output 4.1.1. Estabilisment of climate change working group in donggala and parigi moutong district, with activity; 1. Climate change FGD and per OPD; 2. Team formation Initiator of API POKJA formation; 3. Facilitate the preparation of the statutes of the API POKJA; 4. Workshop on Formation of POKJA API in 2 districts; 5. Facilitating the Issuance of a Regent's Decree on the API POKJA in Donggala and Parigi Moutong districts.
 - Output 4.1.2. Availability of Climate Change Action Plan (RAD API) Documentation for the Donggala and Parigi Moutong Districts, with activity; 1. Formation of Expert Panel; 2. Document Preparation Desk by Expert Panel and API POKJA; 3. RAD API Document Design Consultation; 4. Regional Seminar on RAD API in Donggala and Parigi Moutong districts; 5. Approval of RAD API Documents through Perbub; 6. Community Organizing / Mentoring and

Assistance in organizing village communities

And Output 4.1.3. Promotion and dissemination of climate change handling actions of climate change adaptation actions, with activity; 1. Social media campaigns on adaptation initiatives and actions; 2. Media Gathering, and; 3. Adaptation action festival

- 64. Local-level initiatives will be supported by institutional development and policy strengthening at the regional level. This stage will distribute authority and responsibility vertically to the local governments in Donggala and Parigi Moutong districts. Consequently, adaptation will be internalized into the regional policy agenda, ensuring sustainability both in terms of funding commitments and programmatic aspects. At this stage, the adaptation agenda is legally and formally transformed, becoming a development orientation with legal force and obligation. The adaptation agenda will be expanded due to the comprehensive nature of regional regulations and policies, covering all administrative areas and spanning various sectors. Technically, the adaptation objectives are oriented towards the design of programs and activities of the local government organizational units (OPD)
- 65. Technically, the strengthening of institutional frameworks and policies in the regions will be carried out through the formation of API POKJA (Climate Change Adaptation Working Group) and the development of RAD API (Regional Action Plan for Climate Change Adaptation) documents. This will position both districts as the first to have such instruments. The development of RAD API as a regional policy will be based on the Minister of Environment and Forestry Regulation No. P.33/Menlhk/Setjen/Kum.1/3/2016 concerning the guidelines for the preparation of climate change adaptation action plans. It will be synchronized with the National Action Plan for Climate Change Adaptation (RAN-API) by the National Development Planning Agency (BAPPENAS). The ratification of the RAD API will be established through a Regent's Regulation (Perbub) or Regional Regulation (PERDA), while the API POKJA will be formalized through a Regent's Decree.
- 66. To integrate the implemented policy adaptation action plans, a consortium with the Regional Development Planning Agency (BAPPEDA) in both districts will conduct coaching clinics for the preparation of the Strategic Plan (Renstra) and Annual Work Plan (Renja) of the local government units (OPD). These plans will serve as the foundation for the formulation of the Regional Government Work Plan (RKPD), which will be incorporated into the General Budget Policies and Provisional Budget Ceilings and Priorities (KUA PPAS). Subsequently, this will be discussed as part of the Regional Government Budget (APBD)
- 67. Enhancing community readiness and increasing farmers' awareness of climate change impacts are key components of strengthening institutional capacity at the ProKlim (Community-Based Climate Change Adaptation) program at the grassroots level. Capacity building at the local level, coupled with the availability of software tools up to the provincial level, is expected to foster and support various creative community efforts aligned with increasingly recognized economic and environmental objectives necessary for sustainable development. The revitalization of social capital, long undertaken by local communities, and the adoption of creative ideas such as climate schools will certainly be effective institutional strengthening measures to enhance the capacity and effectiveness of community adaptation to climate change.

B. Economic, Social and Environment Benefits b.1. Social Economic Benefit

- 68. This project will have a direct impact on climate change adaptation actions through the development of social resilience and livelihoods. By providing capacity-building support, as well as financial and marketing assistance to small-scale demersal fisheries, agriculture, and microsmall enterprises, the project targets vulnerable households and those in extreme poverty. This support will lead to a reduction in household vulnerability and an increase in adaptive capacity, making poor households more resilient to negative effects and impacts of climate change. The implementation of collective adaptation actions throughout the program will enhance community cohesion and solidarity in facing various risks arising from climate change. As a community experienced in dealing with and overcoming disaster situations, we and most people in the program area recognize that solidarity and collectivity are essential social capitals in facing emergencies, such as those resulting from natural disasters, which are one of the impacts of climate change
- 69. Indigenous peoples in each project village are a valuable source of local values and knowledge, which are expected to play an important role in the sustainability of the ProKlim village program. Through their deep understanding of the environment and sustainable traditional practices, indigenous peoples are expected to actively contribute to the implementation and management of this program, ensuring better social, economic, and environmental sustainability.
- 70. The expected indirect beneficiaries in 15 villages across 6 sub-districts in the project sites in Donggala and Parigi Moutong districts are estimated to be 23,149 individuals, comprising 11,919 males and 11,230 females. As for the direct beneficiaries, the total is 1,044 individuals, divided into 799 males and 245 females

b.2. Environmental Benefits

71. The implementation of this program is expected to provide significant and sustainable environmental benefits, both in the forestry sector and coastal area management. The program is projected to restore and improve 8,529 hectares of forests, 130 hectares of mangroves, and 10 hectares of coral reefs through rehabilitation activities. These activities will serve as corrective measures, considering the trend of destructive resource management that has occurred so far. In addition to ecosystem recovery, the program will also initiate the establishment of two new protected areas, designated as Marine Conservation Areas (DPL) or Preserved Area. The establishment of these new protected areas will be a vital conservation incentive in the Tomini Bay and Makassar Strait, along the neck of Sulawesi, a region with intense marine activities but currently lacking such protected zones.

b.3. Gender Benefits and Vulnerable Groups

- 72. Gender is a cross-sectoral issue; therefore, gender mainstreaming will be integrated into all components of the project. In the context of this project, the enhancement of women's participation and access will be pursued through affirmative approaches. This includes setting a minimum representation of 30% women in every meeting, training session, organizational leadership structure, and in matters of delegation.
- 73. The design of this program has been developed taking women into account, as evident in its principled and conceptual narratives and statements. This focus is also reflected in the design of the program's outcomes and the derivative activities, which include activities specifically allocated for women. The beneficiary format explicitly prioritizes women by recognizing them as a vulnerable group. Furthermore, gender equality and empowerment will be pursued through an approach based on the three pillars of the Gender Equality and Women's Voice

Framework, which are: 1) Building agency (aspirations and abilities); 2) Relationships; 3) Addressing structures.

C. Analyst Cost-Effectiveness

- 74. To significantly improve the effectiveness and adaptive capacity of communities in the ecoregion, this project/program outlines seven key outcomes: 1.1 Increase in village access through the establishment of ProKlim villages; 1.2 Increase knowledge and circulation of information on climate adaptation; 2.1 Better management of social forestry in the neck of Sulawesi; 2.2 Sustainable of Marine Protected Area (MPA); 2.3. Environmental functions in critical land zones restored; 3.1. Increase micro/small businesses with adaptive innovation; 4.1. The availability of climate change adaptation policies at the district level monitored by the Climate Change Working Group, officially supported by the district government.
- 75. The seven outcomes mentioned are derived from the main objectives of the project/program, following an analysis of various secondary data and the results of interviews with multiple stakeholders, as well as a Rapid Rural Appraisal conducted by the Consortium Team KUAT, composed of Karsa Institute, Komiu, Awamgreen, and Untad.
- 76. The consortium's study has also generated 19 outputs from the six outcomes mentioned above. Based on the activities required to produce each output and their impact on the outcomes, the following table illustrates the costs associated with each project/program outcome.

Outcome		Cost (US \$)
Outcome 1.1	Increase in village access through the establishment of Proklim villages	204.958
Outcome 1.2	Increase knowledge and circulation of information on climate adaptation	38.802
Outcome 2.1	Better management of social forestry in the neck of Sulawesi	72.509
Outcome 2.2	Sustainable of Marine Protected Area (MPA)	21.868
Outcome 2.3	Environmental functions in critical land zones restored	175.807
Outcome 3.1	Increase micro/small businesses with adaptive innovation	215.166
Outcome 4.1.	The availability of climate change adaptation policies at the district level monitored by	104.346
	the Climate Change Working Group, officially supported by the district government	

Tabel 7. Costs Required for Each Project/Program Outcome

77. Table 7 above shows that Outcome 3.1. requires the largest funding, **amounting to US\$ 215.166** This funding will be allocated to 15 villages to support the livelihood development of vulnerable communities, including women. The budget proportion is highly appropriate as it relates to improving the socio- economic resilience of the most vulnerable households, who are at the highest risk of climate change impacts. For Donggala District, this budget is strategically important as it coincides with efforts to recover the livelihoods of communities affected by the September 28, 2018, earthquake and tsunami. The Covid- 19 pandemic has been known to hinder the recovery efforts of disaster-affected communities. The second-largest budget allocated to achieve outcome 1.1. (205.959 US\$) this outcome will contribute to strengthening village-based adaptation capacity. A village is a community unit that inhabits a certain area. Village-based adaptation will have implications for strengthening community-based adaptation (individuals and institutions) and ecosystem-based adaptation. In addition to focusing on intervening in 15 target villages. Outcome 1.1. will also reach 85 other villages (a total of 100 villages) in the Sulawesi neck ecoregion to facilitate ProKlim villages up to the registration stage in the SRN (national registration system) so that these villages are integrated in collective efforts

to increase resilience to the impacts of climate change. this is also in line with the government's target to realize 20,000 ProKlim Villages in Indonesia. so that this program contributes to that effort. The third-largest allocated to Outcome 2.3., totaling **175.807 US**\$ Based on technical assessments and experience, rehabilitation activities funded by the AF can technically be carried out independently (self-managed) by the community. This means that these activities do not require the involvement of third parties (contractors), as is the case with projects typically undertaken by the government. The implementation of activities by the community will increase the cash flow into the villages, thereby impacting the village economy.

78. To assess the effectiveness of the investments listed in Table 7, an Economic Rate of Return (ERR) analysis was conducted. Before conducting the ERR analysis, a model design is performed to understand the project context, which consists of project compartments and an explanation of welfare economics theory regarding project outputs, outcomes, and impacts. In addition to the investment values in the first and second years, the analysis also includes the environmental values (deforestation of dryland forests and mangroves) and agricultural land values. The economic values of forests and agricultural land are estimated using primary data and available reference data (valuation based on labor benefits/income). The economic valuation results in a project's economic value of US\$ 1,472,107.94 (IDR 21,964,218,518.10) per year. Table 8 shows the potential economic value, which consists of 53% from the economic value of dryland forest deforestation, 2% from the economic value of mangrove deforestation, and 45% from the economic value of agricultural land production.

Soil Type	Quantit y (ha/year)	Value /ha/year	Estimation
Deforestation of Dryland Forest	390	US\$ 1.999,64 (Rp29.835.192,31)	Potential TEV US\$ 1,472,107.94
Deforestation of Mangrove	15	US\$ 1.939,04 (Rp 28.931.034,48)	(Rp 21,964,218,51 8.10) /Year
Agricultural Land	1680	US\$1.601,15 (Rp23.889.600,00)	

Table 8. Economic Values of Project Components

79. The investment value (US\$ 999,226) and economic value are used in the economic analysis, resulting in an NPV (Net Present Value) of US\$ 2,146,932.74 (Rp 32,032,773,178.32), and an ERR (Economic Rate of Return) of 54.9% (Table 9). This relatively high level of effectiveness presents a strategic opportunity to increase the income of the local community while strengthening their resilience to climate change. Conversely, if the ecoregion remains in a status quo condition, it will result in an annual loss of US\$ 1.5 million (Rp 21.9 billion). Even if the AF project with the ProKlim Village mission is implemented, it will contribute to environmental benefits of US\$ 134,046.01 (Rp 2 billion) per year and gender benefits of US\$ 67,023.01 (Rp 1 billion) per year.

Year	Cost	Profit	Present Value
0	US\$ 1.325.337,07	US\$662.448,57	US\$ -662.888,49
	(Rp19.774.360.384,96)	(Rp9.883.898.333,15)	(Rp -9.890.462.051,81)
1	US\$ 1.084.366,69	US\$809.659,37	US\$ -254.358,63
	(Rp16.179.022.133,15)	(Rp 12.080.320.184,96)	(Rp -3.795.094.396,47)
2	US\$ 441.632,38	US\$883.264,77	US\$378.628,59
	(Rp6.589.265.555,43)	(Rp 13.178.531.110,86)	(Rp5.649.233.157,95)

		NPV	US\$ 2.146.932,74 (Rp32.032.773.178,32) 54,9%
5	US\$ 0 (Rp 0)	US\$1.472.107,94 (Rp 21.964.218.518,10	US\$1.001.891,93 (Rp 14.948.478.059,40)
4	US\$ 147.210,79	US\$1.324.897,15	US\$865.634,63
	(Rp2.196.421.852,00)	(Rp 19.767.796.666,29)	(Rp 12.915.485.043,32)
3	US\$ 220.816,19	US\$1.251.291,75	US\$818.024,72
	(Rp3.294.632.778,00)	(Rp 18.669.585.740,39)	(Rp 12.205.133.365,94)

Tabel 9. Project Economic Analysis (NPV and ERR)

80. In addition, alternative adaptation actions in this project are more effective, from the aspect of financing and strengthening community capacity. For example, as shown in the following table;

	Mangrove Rehabilitation (By Government Project)	Mangrove Rehabilitation (By womens group)
Total cost	 Preparation of Rehabilitation Technical Design (RANTEK) 561,000.00 / Ha Nursery and Intensive System Rehabilitation Rp 25,854,000 / Ha Plant Maintenance Year 1 Rp 5,058,000 / Ha Plant Maintenance Year 2 Rp 2,504,000 / Ha Cost Per Ha IDR 33,977,000.00 / Ha. Costs required for Mangrove Rehabilitation according to the Target Area of the AF Project = 130 Ha = 4,417,010,000.00 or around 294,467.33 US\$. Total Cost : 294,467.33 US\$. 	 Field School of Mangrove Seedling and Cultivation Techniques for women in 13 villages Rp 231.888.000,00 Mangrove Nurseries by women in 13 villages Rp 424.432.000,00 Mangrove planting by women in 13 villages x 10 Ha (130 ha) Rp 129.296.000,00 Monitoring and maintenance of mangroves by women in 13 villages Rp 80.992.000,00 The cost allocation of rehabilitation 130 Ha mangrove Rp 866,608,000.00 or 57,773.87 US\$ Total Cost: 57.773,87 US\$
Protection benefit	Relatively slow. Protection benefits follow the age of plant growth.	Relatively slow. Protection benefits follow the age of plant growth

¹ Rehabilitation costs are calculated based on the standard cost price, which is stipulated in the Basic Activity Unit Price, PDASRH, Ministry of Environment and Forestry, 2024.(Harga Satuan Pokok Kegiatan, PDASRH, Kementrian LHK, 2024)

	Mangrove Rehabilitation (By Government Project)	Mangrove Rehabilitation (By womens group)
Materials	Biological Material. Sourced from around the location, slowly accumulate	Biological Material. Sourced from around the location, slowly accumulate sediments
	sediments and biomass	and biomass
Carbon efficiency	Relatively low emission, able to absorb carbon	Relatively low emission, able to absorb carbon
Support provision of ecosystem services	Suitable with ecosystem characteristics	Suitable with ecosystem characteristics
Effect for coastal	Mangrove: beneficial	Mangrove: beneficial
ecosystems	Seagrass: can be beneficial	Seagrass: can be beneficial
	Coral reefs: beneficial	Coral reefs: beneficial
Socio-cultural viability	Not participatory, does not provide new knowledge, and is implemented by contractors.	Transformation of knowledge and techniques. Community-based and increasing participation. According to socio-cultural characteristics and ecosystem characteristics. Inclusive.
Scalability and Effectivness	High cost standards. Potentially less effective because it does not foster a sense of ownership. So the risk of low growth	High scalability potential, because the community has the ability to implement. Including independently. More effective because the community has responsibility and a sense of ownership, so that long-term maintenance can be carried out.
Economic retention	High Leakage of materials and implementers (contractors) come from outside. Government budget is not directly received by the community	Low leakage. Costs are distributed within the village. both for nursery installations, seed providers, labor for nurseries and planting.

Table10. Comparison of government Mangrove Rehabilitation Projects with Community-based Mangrove Rehabilitation

81. Another cae that can demonstrate that the alternative adaptation actions in this project are more effective and contribute to increasing community capacity can be seen in the coral reef restoration activity with an area of 10 Ha, using the Bioreeftek method.

	Fish Doom	Spider/Reef Star	Bioreeftek
Total cost			
	\$ 62,50 / Unit \$ 31,850	\$ 31.25 / Unit \$ 63,100	\$ 15,63 / Unit \$ 16,034
Protection/ Recovery benefit	faster in the early stages, coral branches grow from the fragmentation of living coral	faster in the early stages, coral branches grow from the fragmentation of living coral	slower in the early stages. requires the process of attaching coral planula larvae. Growth is faster afterward.
Materials	Cement, Sand, concrete iron, Epoxy glue, Coral	Sand, concrete iron, Resin, Coral Fragmentation all	Cement, Sand, Hollow Iron or Bamboo, Concrete Iron, Coconut

	fragmentation all materials and work equipment are brought from outside.	materials and work equipment are brought from outside.	Shell.
Carbon efficiency	The placement process requires large boats, with higher fuel consumption (emission levels)	The placement process requires large boats, with higher fuel consumption (emission levels)	some materials (coconut shells, bamboo) is organic, available at the location. The placement process can be done by small boat or rowing boat.
Support provision of ecosystem services	Suitable with ecosystem characteristics	Suitable with ecosystem characteristics	More Suitable with ecosystem characteristics. Because there no need for coral fragmentation
Effect for coastal ecosystems	Mangrove: can be beneficial Seagrass: can be beneficial Coral reefs: beneficial	Mangrove: can be beneficial Seagrass: can be beneficial Coral reefs: beneficial	Mangrove: can be beneficial Seagrass: can be beneficial Coral reefs: beneficial
Socio-cultural viability	not related to socio-cultural viability	not related to socio-cultural viability	Techniques and materials are related to the culture of coastal communities.
Scalability and Effectivness	high cost, requires special tools and skills in manufacturing so it is difficult to otential for self-replication	high cost, requires special tools and skills in manufacturing so it is difficult to otential for self-replication	Low cost. Materials are available in the village. Simple working methods and equipment, potential otential for self-replication
Economic retention	High leakage as the materials coming from outside	High leakage as the materials coming from outside	Low leakage because some of the material and worker is locals

Tabel 11. Comparison of the effectiveness of coral restoration with fish dome, Spider and Bioreeftek techniques

82. The sustainability of these achievements is ensured by the availability of the API (Climate Change Adaptation) institutions, from the village to the district level. This institution is both an achievement and a sustainability strategy. Strengthening the institution ensures that the API institutions will be functional, allowing them to manage access and allocate resources to continue adaptation actions, including sharing learning and replicating adaptation actions.

D. Alignment with National/Sub national Sustainable Development Strategies

- 83. The national policy direction is outlined in the RPJMN 2020-2024 document, which includes environmental improvement, disaster resilience enhancement, and climate change, consisting of: (a) Improving Environmental Quality; (b) Enhancing Disaster and Climate Resilience; and (c) Low Carbon Development. Furthermore, regarding the direction of increasing climate and disaster resilience, this is achieved through strengthening convergence between disaster risk reduction and climate change adaptation.
- 84. Indonesian NDC. Indonesia has stated its commitment to participate in reducing emissions in

accordance with the Paris Agreement, through the NDC (2016). In 2021, Indonesia updated its climate commitment through the Updated NDC document. The emission reduction targets in the energy, forestry and land use sectors have increased slightly, especially in scenarios with international support. In addition, the Updated NDC also includes Climate Change Adaptation targets that focus on economic, socio-livelihood, and ecosystem and landscape resilience. In 2022, Indonesia increased its emission reduction ambition through the Enhanced NDC (ENDC) document. The emission reduction target increased to 31.89% with its own efforts to 43.2% with international support. Indonesia has published the Nationally Determined Contributions Adaptation Roadmap in 2020) This NDC Adaptation Roadmap document was published as a reference in the preparation of more technical planning and implementation of Climate Change Adaptation at the sectoral and regional levels. This NDC Adaptation Roadmap is a guideline for translating the commitments contained in the NDC document into various national action plans outlined in the National Adaptation Plan document, in order to realize national development that is adaptive to climate change and the Regional Action Plan, in realizing regional development that is adaptive to climate change. Indonesia's commitment to climate adaptation, by increasing climate resilience through the development of economic, social, livelihood, ecosystem, and landscape resilience. The NDC adaptation target, as stated in the NDC Roadmap, is to build resilience and increase adaptive capacity to reduce the risk of climate change by 2.78% of GDP.

NDC Adaptation Road Map is used as one of the references in national development planning. The National Medium-Term Development Planning (RPJMN 2020-2024) includes adaptation under the 6th development agenda (Enhancing the environment and resilience to natural disaster and climate change impacts), focusing on water, agriculture, health, and coastal and marine ecosystems. In general, the key programs, strategies and actions on adaptation; a) reducing drivers of vulnerability to climate change impacts, b) responding to climate change impacts and managing risks, c) enhancing capacity of communities and sustainability of ecosystem services, d) enhancing engagement of stakeholders at all levels in building climate resilience.

- 85. The policy direction is embodied in the Climate Resilience Enhancement strategy, which is implemented through the execution of the National Climate Change Adaptation Plan in priority sectors. These sectors include (a) Coastal and Marine Sector Vulnerability Protection, involving the strengthening of ecosystem-based adaptation infrastructure, raising public awareness, technology development, and livelihood diversification for coastal communities; (b) Water Resilience Protection in Climate Change Risk Areas, through the enhancement of raw water supply and protection against water damage; (c) Food Security Protection against Climate Change; and (d) Protection of Public Health and the Environment from Climate Change Impacts.
- 86. Strategic Plan 2020-2024 Directorate General of Climate Change Control. (Dirjen PPI) One of the targets in the strategic plan is improved regional resilience through climate adaptation, by ensuring availability of vulnerability and risk data and information at regional level and number of villages participating in the ProKlim program. This project will generate coastal vulnerability assessments associated with tropical cyclones and will promote the implementation of ProKlim. Dijen PPI is targeting 20,000 ProKlim Villages throughout Indonesia, and this Project will facilitate the proposal of 100 ProKlim Villages, and assist 15 ProKlim Pilot Model Villages.
- 87. **Regional Medium-Term Development Plan (RPJMD).** The policy direction for the development of Central Sulawesi Province is outlined in the 2021-2024 Regional Medium-Term Development Plan (RPJMD) document, which was established through Regional Regulation Number 13 of 2021 on the RPJMD. The 2021-2024 RPJMD was formulated with consideration

and internalization of Governor Regulation Number 5 of 2021 on the Environmental Protection and Management Plan

The regulation states that the objectives of the regulation are: 1). to enhance the protective function of areas, particularly those providing water regulation and storage services as well as biodiversity provision services (genetic resources and species habitat); 2). to ensure the availability of quality water for life and sustainable development; 3). to improve the quality of soil, water, air, and sea; 4). to improve the condition of coral reef, seagrass, and mangrove ecosystems, especially in areas around marine utilization and conservation zones; 5). to minimize the risk of natural disasters and the negative environmental impacts borne by the community; 6). to ensure environmental support for sustainable food production; 7). to strengthen institutional support and governance in implementation; and 8). Plans for sustainable environmental protection and management.

Based on this, it can be assured that the design of this program is relevant and aligns with the policy direction of the local government.

E. Compliance with National Technical Standards and Compliance with Environment and Social Policy of the Adaptation Fund.

- 88. This project will be implemented by observing, following and complying with national technical standards.
- 89. This project will propose 100 ProKlim Villages and develop 15 of them as models. ProKlim is one of the priority policies of the Ministry of Environment and Forestry to strengthen adaptation capacity as well as recognition of climate change adaptation and mitigation efforts carried out by communities. Facilitation of ProKlim Villages must be carried out under national regulations and technical standards. Which includes identification, data collection and mapping, registration in the national registration system (SRN) based on the Sprctrum application, assistance and assessment and strengthening. These aspects are regulated by the Regulation of the Minister of Environment and Forestry No. P.84 / Menlhk-Setjen / Kum.1 / 11/2016. Concerning the Climate Village Program.
- 90. To provide a legal basis for village governments to implement the ProKlim Program based on village authority, the target villages will issue village regulations on ProKlim Villages. The preparation of Village Regulations must be carried out by following the guidelines for the formation of village regulations as regulated in Law Number 12 of 2011 concerning the Formation of Legislation, Government Regulation Number 43 of 2014 concerning the Implementing Regulations of Law Number 6 of 2014 concerning Villages, and Regulation of the Minister of Home Affairs Number 111 of 2014 concerning Technical Guidelines for Regulations in Villages. Members of the KUAT Consortium, such as Karsa, Awam Green and Komiu, have legal staff and have experience in facilitating the formation of Village Regulations. However, in its implementation, the Consortium will consult, or even involve the Legal Section of the Regency Government in the process of facilitating the preparation of village government.
 - 1. This project will also facilitate access to increase through social forestry (social forestry) by means of;fasilitasi pengajuan izin Perhutanan sosial baru
 - 2. Dukungan pengelolaan dan pemanfaatan perhutanan sosial paska izin
- 91. General provisions on Social Forestry, including procedures, standards for social forestry facilities, are regulated by the Minister of Environment and Forestry Regulation Number 9 of 2021 concerning Social Forestry. Meanwhile, the provisions for managing social forestry, which consist of; 1. Institutional Management, 2. Business Management and 3. Area Management, which are implemented through the establishment of Social Forestry institutions, Preparation

of Planning Documents, such as RKPS (Social Forestry Work Plan) and RKT (Annual Work Plan). These provisions also include the arrangement of boundaries and zoning which are part of social forestry management. In zoning, social forestry rights holders can regulate the allocation of Social Forestry areas into categories; utilization zones, protection zones and rehabilitation zones. Zoning is determined based on potential, biophysical conditions, land cover and socio-cultural aspects. Zoning boundaries are marked with boundaries. consisting of the outer boundary, namely between the social forestry area and the non-social forestry area, and the inner boundary, which is the boundary between the types of zoning. Technical zoning arrangements, as part of area management, are regulated based on the Regulation of the Minister of Environment and Forestry Number 4 of 2023 concerning Social Forestry Management in forest areas with special management. To ensure that the provisions in this regulation are met, and at the same time as part of the verification of the implementation of this activity, it will involve BPSKL (Social Forestry and Environmental Protection Agency) and BPKH (Forest Area Stabilization Agency), namely the Government Agency under the Ministry of Forestry that handles Social Forestry and Forest Area Boundaries.

- 92. For interventions in coastal and marine areas, through the establishment of new Marine Protected Areas (MAP), Mangrove Restoration, Coral Reef Restoration and Small Scale Fisheries (SSF). In general, provisions regarding this are regulated in Law Number 1 of 2014 concerning Management of Coastal Areas and Small Islands. In a more technical context, the implementation of mangrove and coral reef rehabilitation will be carried out by following the provisions of Presidential Regulation Number 121 of 2012 concerning Rehabilitation of Coastal Areas and Small Islands. According to this regulation, rehabilitation activities include planning, implementation, and maintenance. Specifically, government provisions regarding Mangrove management are regulated through Presidential Regulation (PEPRES) No. 73 of 2012 concerning the National Strategy for Mangrove Ecosystem Management. Mangrove forests grow in state forest areas and private land. Mangrove management is under the authority of the BPDAS (River Basin Management Center) UPT Ministry of Environment and Forestry, under the Directorate General of Watershed Management and Forest Rehabilitation.
- 93. In this provision there are no restrictions for the community to participate in preserving the mangrove ecosystem through supervision and restoration. Presidential Decree 73, in fact, emphasizes the importance of community involvement in protecting and restoring Mangroves. BPDAS regulates the protection and restoration of Mangroves in the State Forest Area, One of the technical regulations on mangrove management is regulated in the Decree of the Director General of Watershed Management and Forest Rehabilitation No. SK.17 / PDASRH / SET / KEU.0 / 10/2023 Concerning the Unit Price of Main Activities in the Field of Watershed Management and Forest Rehabilitation in 2024. However, this Regulation only applies to activities funded by the APBN. In general, BPDAS's plan for mangroves is outlined in the ecosystem restoration plan. Therefore, coordination with BPDAS will be needed in order to involve stakeholders and synchronize restoration activities. In addition to mangroves, this project will also restore 10 Ha of coral reefs.
- 94. The implementation of Restoration will use the Bioreeftek method. There are 2 Regulations related to coral reef rehabilitation. 1). Regulation of the Ministry of Marine Affairs and Fisheries (KKP) No. 24 of 2016 concerning Procedures for Coastal and Small Island Rehabilitation, and 2). Regulation of the Minister of Environment and Forestry No. 48 of 2014 concerning Procedures for Implementing Ecosystem Restoration in Nature Reserve Areas and Nature Conservation Areas. Although it regulates the same object, these regulations do not overlap because they are applied to different area functions. Regulation of the Minister of Environment and Forestry No. 48 of 2014, in conservation areas, while Regulation of the Minister of Marine Affairs and Fisheries No. 24 of 2016, is applied in fisheries management areas or WPP. The Tomini Bay and Makassar Strait areas which are the intervention areas of this project are

codified as WPP 715 and WPP 713. Thus, coral reef rehabilitation activities in this project refer to Regulation of the Minister of Marine Affairs and Fisheries No. 24 of 2016.

The procedure for coral rehabilitation will be carried out using the bioreeftek method which uses biological materials (coconut shells), and does not require coral fragmentation. The bioreeftek method will refer to the bioreeftek technical guidelines, published by the Marine Research and Observation Center (BROL), Ministry of Marine Affairs and Fisheries in 2018.

For interventions related to Capture Fisheries, especially Small Scale Fisheries, this activity will refer to the Regulation of the Minister of Marine Affairs and Fisheries Number per.14/men/2011 concerning Capture Fisheries Business, as well as the standards and code of ethics for Responsible Fisheries issued by FAO - KNTI, the Code of Conduct for Responsible Fisheries or (CCRF).

- 95. This project also targets the Establishment of Marine Protected Areas or (MPA), This is in accordance with the spirit and is reinforced by the issuance of Law No. 32 of 2024 concerning Conservation of Natural Resources and Ecosystems. The law adopts the view that areas with high conservation value are not only located in conservation areas, and the need for protection of ecosystems and natural services is universal, so that it is also needed by community groups who do not live around conservation areas. Therefore, the determination of MPA becomes increasingly relevant.
- 96. Marine Protected Area (MPA) is determined by the regional government through Regional Regulation (PERDA). The Regional Regulation is discussed and determined jointly by the Head of the Regional Government (Bupati) and the Regional People's Representative Council (DPRD). The process of forming regional regulations will begin with the preparation of academic papers, and the preparation of the body of the Regional Regulation in a document called the Draft Regional Regulation (RANPERDA). The Draft Regional Regulation is proposed by the Regent or DPRD, so that it is included as an agenda for discussing regulations, which is referred to as Propemperda (regional regulation formation program) determined by the DPRD. After being included in the schedule, the draft is discussed and determined jointly. The stages of forming regional regulations are regulated in Law No. 12 of 2011 concerning the Formation of Legislation, which has been amended to Law No. 15 of 2019. Although, the parties discussing the Regional Regulation are the regional government and DPRD, the community can provide proposals to the regional government to discuss and determine certain regional regulations. This is regulated in Government Regulation No. 45 of 2017 concerning Community Participation in the Implementation of Regional Government. These provisions will be the basis for IE and EE to submit a Regional Regulation to establish a new protected area.

Regional Regulations will also be issued to establish adaptation institutions and Regional Adaptation Plans (RAD). The contents of this document will be prepared with reference to the Regulation of the Minister of Environment and Forestry Number 33 of 2016 concerning Guidelines for the Preparation of Climate Change Adaptation Action Plans, this process will be led by a Team from Tadulako University and involve various sectors and regional apparatus organizations.

97. In addition, this project will also use the Agroforestry approach as a technology for cultivating plantations and at the same time sustainable land use. The government regulates the development of agroforestry with the Regulation of the Directorate General of Watershed and HL Control, Number P.7 PDASHL / SET / KUM.1 / 8/2017 concerning Technical Instructions for the Implementation of Agroforestry. This regulation binds the development of agroforestry carried out through the government budget, and agroforestry built as part of the rehabilitation of state forest areas. The implementation of agroforestry development will be carried out with reference to these provisions. However, the project will also consider the forms of traditional

- agroforestry developed by the community. The Traditional Community of Central Sulawesi has developed various agroforestry models based on their empirical experience. One example is pampa agroforestry².
- 98. Related to the environmental aspect, this program ensures that all interventions carried out do not conflict with environmental principles. As regulated in Law Number 32 of 2009 concerning the Environment. Through this law, the government stipulates the existence of environmental permits, for a business/business that falls into the category of "Mandatory" permits in the form of AMDAL Documents, UKL-UPL, or SPPL depending on the scale of the business. The definition of mandatory business, is applied to activities that have an impact on damaging the environment (large infrastructure development, businesses that have the potential to cause pollution (water and air) permanently, cause changes in the natural hue, etc.) the results of our study, (and also based on the experience of implementing the program) the design of the KUAT consortium program is not included in the "mandatory" environmental permit activities.

F. Duplication of Project with other funding source

99. Based on the results of consultations and field observations, the Consortium did not find any potential duplication of projects/programs from other funding sources. Although there are other projects implemented by the government (KPH) with funding sourced from the Forest Investment Program (FIP). This project focuses on improving the management of the National Forest Area in the KPH Dampelas Tinombo work area, which covers 10 villages and 4 subdistricts. The 10 villages in question include: Karya Mukti, Malonas, Lembah Mukti, Oncone Raya, Sigega Bersehati, Bondoyong, Sintuwu Raya, Sipayo, Siweli, and Sibualong. None of these 10 villages are part of the intervention area of this program.

Although different, the orientation of the KPH program supported by FIP2 does not have the potential to conflict with this Program design. On the contrary, the outcomes of the project can reinforce and complement each other. For example, in terms of improving the management of the state forest area in the KPH Dampelas Tinombo region. The outcomes of this program are expected to strengthen effective management capabilities, thereby helping to reduce the rate of deforestation and forest degradation, which in turn increases the risk of disasters for the community. The FIP 2 project at KPH Dampelas Tinombo, named "Promoting Sustainable Community-Based Natural Resource Management," is funded by a grant from the World Bank. This project lasts for 5 years, starting on June 29, 2016, and ending on December 31, 2021. To ensure synergy and complementarity between this project and the achievements of FIP2, the KUAT Consortium will identify and trace the achievements of this project in the field, including the FIP2 target groups. The results of this identification will be used to analyze opportunities and decide whether to continue or not the results achieved, including considering the possibility of using or not using the same target groups.

100. Based on consultations with civil society groups, we are aware of a post-permit social forestry strengthening project implemented by CAPPA, with funding from MISEREOR. This project is implemented in the villages; Bondoyong, Sipayo, Lado, West Sidoan, South Sidoan and West Binaa village. This project has been running since 2018 and will end in 2025. The focus of this project is similar to output 2.1.1. Increases access to social forestry and revitalization of Social Forestry access holders. The difference is that CAPPA only works to strengthen post-permit capacity, while the Kuat consortium works to strengthen post-permit capacity and facilitate new social forestry permits. In terms of location, we ensure that this project does not overlap because based on the location overlay, this project is implemented in a

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² Agoforest Pampa: Hak dan Kedaulatan (2024), Syukur Umar, Yodo, S., Saleh, R & Desmon

different location from the locus of the KUAT consortium Adaptation Fund project. However, the learning from the CAPPA project will be taken into account as learning material for this project.

G. Learning and Knowledge Management

- 101. In this project, knowledge management and learning will be managed through the Documentation and Information Process which functions to provide/process and store information for the benefit of Decision making, producing and disseminating knowledge packages. At the project implementation stage, both at the planning, implementation, and monitoring and evaluation levels.
- 102. The process of documentation and information management as part of learning will be carried out with the following principles: first. Management must be holistic, comprehensive, accurate, systematic, complete, and multi-media, so that it is truly able to support project implementation. Second, the packaging must be accessible or easily accessible to all consortium work units and information network partners, to further encourage the effectiveness and efficiency of project management.
- 103. Various types of information are stored in an electronic database covering various quantitative and qualitative information with multiple categories. In addition, information in the form of documents stored on the project host: in the form of books, reports, journals, magazines, and various reference materials with multiple categories and multiple types. This information comes from field staff reports, research results, documentation, books/ journals/ papers/ magazines /newspapers and other written information materials.

Procedures used in collecting project documentation and information include:

- a. collecting and packaging information
- 1. As a chain of knowledge management, documentation and information management in principle starts from work units outside the documentation and information unit. This means that information that is already in the form of reports processed by other units is collected, registered, and stored according to the library management procedure, while other reports/information will be directly processed or transferred into the database model
- 2. Basic information that has been collected is processed by publication and information staff into information with other categories, namely factsheets, books, journals, posters, brochures, social media content
- 3. To ensure the smooth supply of information from existing work units to the documentation and information unit, the staff responsible can use their authority to collect directly or collect through the Project Coordinator or through general meeting forums.
- b. Information Dissemination
- 104. Information packages that have been systematically compiled are disseminated internally or can be accessed again by work units that require information for decision making, public relations and publications, for making reports, and even making other organizational documents
- 105. Information packages can be accessed by external parties through clearing house activities, either through library services, internet services, brochures, short films, journals, social media content, infographics and postersKnowledge management and learning are in Component 1: Output 1.2.1. namely; Increasing knowledge about adaptation, as well as circulation of climate information. This output will be achieved through activities; 1.

Development of Climate Schools in 15 villages; 2. Intensive training in operating aerial and underwater drones for the Millennial Generation, 3. Regular monitoring of forest and coastal health by the Millennial Generation and; 4. Updating periodic reports on land cover changes and displaying infographics on forest and coral reef health in 15 villages.

- 106. And Component 4, Output 4.1.3. Promotion and dissemination of climate change handling actions of climate change adaptation actions, with activity; 1. Social media campaigns on adaptation initiatives and actions; 2. Media Gathering and Publication and 3. Adaptation action festival
- 107. Knowledge and learning management will include writing and publishing curriculum and syllabus, modules, papers, handbooks, for climate schools and drone operations. manuals for coral reef and mangrove restoration, manuals on agroforestry development procedures. Publishing reports on ecosystem health monitoring results, publishing research reports, including in the form of journals and books.
- 108. A more popular approach will be taken by actively producing social media content that reports on activity coverage, interesting events that contain education, infographics, testimonials from residents that will be published through websites and social media platforms such as Facebook, Instagram, X and TikTok. Publishing short film packages will also be carried out as part of the documentation and publication of learning. These short films will be screened through the YouTube platform, and also displayed at the village office and during the adaptation action festival.
- 109. three important elements require attention in every component of the program: orientation towards knowledge management, communication strategies, and an appropriate learning system. These elements are crucial in climate change adaptation efforts as they relate to the development of the knowledge capacity of stakeholders. Specific and linear activities that will support this include:
 - a). Encouraging district governments to socialize the Climate Change Adaptation Action Plan. This is intended to facilitate coordination and knowledge management, updating issues developing in villages up to the sub-district level, as well as synthesizing data and information from learning experiences. From this, it is expected that the effectiveness of the Climate Change Adaptation Working Group (Pokja API) will increase by creating joint plans, conducting joint monitoring, and regularly updating information.
 - b). Socializing the monitoring system and early warning for Climate Change Adaptation as well as informal climate education that can be utilized by various groups.
 - c). Increasing the effectiveness of stakeholders in documenting and socializing project outputs and outcomes, as well as capturing the changes that occur.
- 110. The process and results will be documented in written, visual, and audio-visual forms, stored, and processed into document products, information products, and learning materials. These include social media content, tutorials, infographics, news, short films, journals, and learning materials, as well as in the form of simple empirical guidelines. These will be disseminated both online and offline, taking into account audience segmentation, the community, government and academic institutions. The choice of media and methods for disseminating information will be tailored to the audience. For the community, educational materials can be distributed online and offline, in more diverse forms, such as infographics displayed in

public places, short film screenings, and learning discussions. For the government, learning outcomes can be packaged in the form of policy briefs delivered through discussions, seminars, and audiences. For the academic community, learning can take the form of journals, textbooks, or other teaching materials distributed through various platforms, including through university activities, which can be implemented by Tadulako University, the largest university in Central Sulawesi, a member of this consortium.

H. Consultation Process

111. The consultative process is carried out at two parties, first the government, second at the community. Consultation at the government level consists of the (1). Central Government, especially, the Ministry of Environment and Forestry, especially the Directorate of PPI, and the Representative of the Central Government in the Region called UPT (Technical Implementation Unit), such as BPDAS, BPSKL, BMKG and the PPI Section Office. (2). The Provincial Government, consisting of the Governor, as the Head of the Region, and Related Agencies, such as the Forestry Agency, the Environmental Agency and the Marine and Fisheries Agency. (3). The District Government, consisting of the Regent, and related technical agencies.

At the community level, consultation is carried out at the site level, i.e. Consultations are carried out at the village level, through workshops, FGDs, and in-depth interviews. This process is preceded by, scheduling, determining the method, selecting and deploying a facilitator implementing the consultation, and mapping of stakeholders.

- 112. Key figures who have a high influence at the community level were selected as partners in the consultation process. such as the Village Government (Village Head), Village Representative Body (BPD), customary leaders, women group leaders, local youth, other community leaders and representatives of vulnerable groups.
- 113. To ensure that women's representatives participate in the consultation process, we ask the village government as the organizer to present at least 30% of female participants. In certain conditions, when women's participation seems to experience many obstacles, so that it is less than optimal qualitatively and quantitatively, a special approach is implemented through separate informal meetings and can only be facilitated by female facilitators.

The consultative process involved all key figures, whether in the form of Focus Group Discussion (FGD) or other multistakeholder meetings to identify the interests of each beneficiary, so that the interests of each beneficiary can be maximally accommodated in the project implementation.

The consultation process that has been done can be seen in the following Table 12:

No	Stakeholder	Consultation	Date	Issue/keypoin
		Technique		
	Consultation	on on Provincia	I and Centra	I Government Level
1	Governor of Central	Audience	11 Juli	Program Explanation
	Sulawesi Province,		2022	Endorsement letter
2	BPDAS Palu Poso	Audience	14 Juli	Program Discussion,
			2022	Mangrove rehabilitation plan
				Identification of potential for
				mangrove rehabilitation
3	Social Forestry	Discussion	26 Nov	Update PIAPS Maps

	Working Group Provincial		2023	Update social forestry progress on Central Sulawesi		
1	Central Sulawesi Provincial Environmental Service	Workshop	29 Nov 2023	Climate change adaptation policy and scheme for proposing Proklim Village		
2	Central Sulawesi Regional Office of Climate Change Control.	Workshop	29 Nov 2023	The threat of climate change that has hit Indonesia, especially in Central Sulawesi.		
3	Meteorology and Geophysics Agency of Central Sulawesi Region	Workshop	29 Nov 2023	climate projections, weather anomalies and temperature increases, climate schools and climate-smart farmers		
4	Meteorology and Geophysics Agency of Central Sulawesi Region	Discussion	4 Dec 2023	Discussion of the Climate School implementation scheme Discussion of the Climate crisis,		
5	Central Sulawesi Regional Office of Climate Change Control.	Indept interview	8 Dec 2023	Potential for Forest and Land Fires and Joint Plans for ProKlim Facilitation Forestry Policy related to PS		
6	Central Sulawesi Provincial Forestry Service	Audience	12 Feb 2024	Community Empowerment and Forest Protection in the East and West Coast Areas		
7	Dampelas Tinombo Forest Management Unit	Discussion	15 Oct 2024	Review of FIP program results and Synchronization of AF program plans in the Dampelas Tinombo KPH Area		
	Co	nsultation on l	Distrik Level	(Donggala)		
4	Vice Regent of Donggala Regency	Workshop	1 Dec 2023	Program Explanation Policies that support the Climate Change Adaptation program in Donggala Regency		
5	Donggala District Environmental Service	Workshop	1 Dec 2023	Procedure for proklim village proposals and expanding cooperation with BPBD in addressing the impacts of climate change		
	Consultation on Distrik Level (Parigi Motong)					
6	Parigi Moutong District Environmental Service	Workshop	4 Dec 2023	Proposed project of proklim village in Parigi Moutong		
7	KKP3K Teluk Tomini	Workshop	4 Dec 2023	Conservation and development efforts of marine protected areas (DPL) in Parigi Moutong		
8	Asisten III Sekertariat	Workshop	4 Dec	Impact of flooding due to climate		

	daerah Parigi Moutong		2023	change in Parigi Moutong		
	Konsultasi Desa Kabupaten Donggala					
9	Labuan Toposo Village	FGD	10 Dec 2023	 Discussion of program design Community forest management, forest area boundary arrangement. Mapping of the management area of the Kaili Rai Kori indigenous community, Economic empowerment of indigenous women and youth Illegal Logging Floods 		
10	Labuan Induk Village	FGD	10 Dec 2023	 Discussion of program design Labuan river abrasion Floods Rock mining (quarrying c) Empowerment of alternative farmer economy 		
11	Kumbasa Village	FGD	11 Dec 2023	 Discussion of program design Toaya river abrasion Floods Empowerment of alternative farmer economies 		
12	Taripa Village	FGD	11 Dec 2023	 Discussion of program design Community forest management and forest area boundary arrangement. Illegal Logging Mapping of the Kaili Rai Kori customary area Empowerment of alternative economies of farmers, women and indigenous youth 		
13	Ape Maliko Saloya Village	FGD	11 Dec 2023	 Discussion of program design Community forest management and forest area boundary arrangement. Illegal Logging Floods Empowerment of alternative economy of farmers, women and indigenous youth 		
14	Saloya Village	FGD	12 Dec 2023	 Discussion of program design Community forest management and forest area boundary arrangement. Illegal Logging Illegal gold mining Floods 		

				Empowerment of alternative conomy for farmers and women	
15	Ujumbou Village	FGD	12 Dec 2023	 economy for farmers and women Discussion of program design Community forest management and forest area boundary arrangement. Coastal Abrasion Floods Economic empowerment of farmers, fishermen and women 	
16	Palau Village	FGD	10 Dec 2023	 Discussion of program design Mangrove felling Coral reef damage Economic empowerment of fishermen and Bajo women 	
17	Rano Village	FGD	10 Dec 2023	 Discussion of program design Illegal Logging Community forest management and forest area boundary arrangement. Landslides Economic empowerment of farmers, youth and indigenous women. 	
18	Pomolulu Village	FGD	11 Dec 2023	 Discussion of program design Mangrove felling for mining jetty construction Coral reef damage Landslides Economic empowerment of farmers, youth and women 	
19	Manimbaya Village	FGD	11 Dec 2023	 Discussion of program design Illegal Logging Landslides Economic empowerment of farmers, youth and women 	
20	Bou Village	FGD	12 Dec 2023	 Discussion of program design Illegal Logging Floods Economic empowerment of farmers, youth and women 	
Village Consultation on Parigi Moutong Distric					
21	Ambesia Village	FGD	10 Dec 2023	 Discussion of program design Floods Illegal Logging Bad weather at sea Economic empowerment of farmers, youth and women 	
22	Pebounang Village	FGD	10 Dec 2023	Discussion of program designVillage forest management and forest area boundary	

	Γ	ı	1	
			10.5	arrangement. Floods Drought Hot weather affects the decline of clove and corn farming Economic empowerment of farmers, youth and women
23	Ogoansam Village	FGD	10 Dec 2023	 Discussion of program design River abrasion, drought, flood Hot weather affects the decline of clove and corn farming Economic empowerment of farmers, youth and women
24	Bobalo Village	FGD	11 Des 2023	 Discussion of program design Floods, Drought Mangrove felling Bad weather at sea Economic empowerment of farmers, youth and women
25	Dusunan Village	FGD	11 Dec 2023	 Discussion of program design Bad weather at sea Drought Economic empowerment of farmers, fishermen and women
26	Sintuwuraya Village	FGD	12 Dec 2023	 Discussion of program design Drought Illegal Logging Bad weather at sea Mangrove felling Economic empowerment of fishermen, farmers, youth and women
27	Lombok Barat Village	FGD	12 Dec 2023	 Discussion of program design Strengthening Social Forestry Illegal Logging Drought Economic empowerment of farmers and women
28	Taipaobal Village	FGD	12 Dec 2023	 Discussion of program design Drought Decrease in clove and corn agricultural yields Economic empowerment of farmers and women
29	Dusunan Barat Village	FGD	13 Dec 2023	 Discussion of program design Drought, Bad weather at sea Economic empowerment of farmers, fishermen and women
30	Patingke Village	13 FGD	14 Dec 2023	 Discussion of program design Drought, Decrease in clove and corn agricultural yields

		·	7	,
				Economic empowerment of farmers and women
31	Samabahar Village	FGD	13 Dec 2023	 Discussion of program design Mangrove felling Bad weather at sea Fishermen's economic empowerment Coral reef damage
32	Sigega Bersehati Village	FGD	13 Dec 2023	 Floods Drought Economic empowerment of farmers, youth and women
33	Konsultasi I : Director General of PPI, Directorate of Climate Change Adaptation, Ministry of Environment and Forestry (online)	Zoom Meeting	13 Mei 2024	Discussion of Adaptation Fund Proposal – Partnership - Karsa
34	Konsultasi II: Director General of PPI, Directorate of Climate Change Adaptation, Ministry of Environment and Forestry (online)	Zoom Meeting	18 Jul 2024	 Providing feedback on project design Deepening project design
35	Konsultasi dengan PM CAPPA	Discussion	02 Nov 2024	 CAPPA project information mining on the East Coast Identifying potential project synergies

Table 12. Consultation Process

- 114. Village-level consultations were conducted in November December 2023, attended by a total of 350 people. During the consultation process, no resistance was found to the implementation plan of this project (despite the proposed changes in approach and type of activities) in principle it can be accepted and approved by the government and the community, because it is considered to provide benefits, and will contribute to efforts to empower the community socially and economically, and improve the ecosystem.
- 115. As an illustration, the systematic consultation process is carried out by first explaining the background, which describes various general problems, supported by various data and information related to climate change. In this context, the facilitator also provides an opportunity for the audience to explore environmental changes due to climate change, as well as its socio-economic impacts. The project objectives are explained afterward, including the scope of the area, expected results, indicative beneficiaries, and various activities to be carried out. To ensure that the project design is appropriate, the community is allowed to provide assessments and suggestions for changes both in the context of the approach and activities. At this stage, everyone is given an equal opportunity to provide feedback, but to ensure that women's voices are heard, the facilitator methodically uses an affirmative approach to affirm the opinions of women participants, the poor, the disabled, and other vulnerable groups.
- 116. The results of consultations with various parties and at various levels have been recorded, identified, and analyzed. Relevant and contextually appropriate proposals for change have

been accommodated and influenced changes in the program design, with the following details; a). The results of consultations with the central government (PPI directorate) have resulted in an agreement to provide broader support to propose proklim villages, which were initially 15 villages, to 100 villages. This is done to accelerate the achievement of the government's target to establish 20,000 Proklim villages throughout Indonesia. After the proposal, this program is responsible for making 15 assisted villages as pilot models, while the other 85 villages will be the responsibility of the government. The results of the consultation also strengthen the objectives related to the establishment of new protected areas. In connection with the issuance of Law No. 32 of 2024 concerning Conservation of Natural Resources and Ecosystems. The new conservation law gives authority to local governments to designate conservation areas, areas that have high conservation value, and are called "reserved areas" and are outside the Conservation Area, which is very much in line with one of the program's objectives. (b). The results of the consultation are in line with the agreement with the PPI Regional Office and the Provincial and Regency Environmental Services, related to the facilitation of ProKlim villages, which includes the division of roles for data collection, enumeration, registration and strengthening of ProKlim villages (c). The results of the consultation with BMKG have included "Climate Field Schools" with the involvement of BMKG, from the preparation of learning plans, curriculum preparation to the implementation of learning and evaluation. (d). In addition, in addition to the activities that have been included in the initial design, which have been agreed upon by the community. new proposals obtained from consultations with the community have been accommodated in the program design, for example; mangrove crab cultivation activities, training in preparing village regulations, and assistance in providing superior plantation seeds.

Indigenous People Consultation

117. Before explaining the process of consultation with indigenous communities, we first convey that the results of the final review indicate that there are more diverse indigenous communities in the location than we identified in the initial stage. As previously explained, in addition to the Lauje, Kaili and Dampelas indigenous communities, in the Sulawesi Neck Region, especially in the target location, there are the Balaesang, Bolano and Bajo indigenous communities.

✓ Consultation with the Kaili Indigenous People :

In Labuan Toposo village, the Kaili indigenous community has become a minority, and lives in a separate location from the main village. They live in Sesere hamlet.

During the consultation, the traditional leader and members of the Kaili traditional council in Sesere Hamlet, Labuan Toposo Village, Labuan District, Donggala Regency, were involved. In that process, the KUAT consortium team explained the project plan and interventions that would be carried out. In addition to asking for general responses, the team specifically asked for responses from representatives of the indigenous community, to provide their perspectives.

Responses and input from this group include:

- The head of the Sesere Hamlet Customary Council, Labuan Toposo Village, hopes that this program can help map customary areas and organize customary institutions
- Empowering indigenous community groups through social forestry that has been approved by the ministry in their management areas

 Assisting in the management of climate-resistant agricultural commodities and providing training in making organic fertilizers.

At the end of the consultation process, the Kaili customary community approved the project implementation plan to be carried out in Labuan Toposo Village.

✓ Consultation with the Balaesang Indigenous People :

In the concept note, we refer to this indigenous community as the Dampelas indigenous community, a tribe spread across the West Coast. The latest identification suggests that this ethnic group is the Balaesang tribe, which occupies a promontory jutting into the Makassar Strait, on the west side of the neck of Sulawesi.

There are two villages on this promontory that are predominantly inhabited by the Balaesang tribe, namely Rano and Manimbaya Villages. Consultations have been carried out with the Balaesang indigenous community in both villages. covering Rano Village and Manimbaya Village, Balaesang District, Donggala Regency. In the consultation process, the KUAT Consortium team presented the project design including 4 project components. The responses and input obtained from this consultation include:

- The customary head of Rano Village hopes that this project can help map the area where the Balaesang tribe lives in Rano Village.
- In Rano Village there is a lake (Rano), the community asked for the project to help restore the productivity of freshwater fisheries (lake) and good lake management;
- Other customary councils hope that customary institutions can be strengthened in terms of legal capacity, because currently their customary areas have been burdened with mining permits by the local government. At the end of the consultation process, the Dampelas customary community agreed to the project implementation plan and committed and involved themselves to support every activity.

✓ Consultation with the Lauje Indigenous People:

Consultation with the Lauje indigenous community, especially in Patingke Village, Pebounang, West Lombok and Dusunan Village. Parigi Mautong Regency. In the consultation process, the KUAT consortium team presented a project overview, then the Lauje indigenous community responded to the presentation delivered during the consultation, some responses and input in the project design, namely:

- The Lauje indigenous community hopes that this project can help them map the Lauje tribal customary areas in the mountains and the customary areas on the coast
- The Lauje indigenous community hopes that this project can strengthen the Lauje tribal customary institutions, especially in the management of natural resources including climate change adaptation actions.

At the end of the consultation process, the Lauje indigenous community agreed and committed to supporting every activity carried out.

✓ Consultation with the Bajo Indigenous People

Pomolulu Village, inhabited by the majority of the Bajo (Bajau) nomadic tribe who are accustomed to living on the coast, small islands and coral islands, which have shallow coral reefs. In the consultation process, the Bajau people were interested in implementing coral restoration with bioreeftek. They hope this project can help restore their coral reefs. They also want their marine area to be organized, so that certain areas can be protected as a place for fish to spawn. Blast fishing is a major problem, and disrupts their livelihoods, they

hope the project can help enforce the law by involving POLAIRUD. Fishery cultivation is proposed to accommodate fish farming, and the enlargement of "class" fish such as grouper which are of high value in certain seasons.

✓ Consultation with the Bolano/Boano Indigenous People

The consultation was held in Bolano Barat village, Bolano sub-district, Parigi Moutong regency, which is inhabited by the Bolano tribe. The majority of consultation participants were women, who came because they felt they had an interest in this program, because most women in this village work as mangrove crab catchers. They hope that this program can slow the rate of conversion of mangroves into ponds, especially around the Rano lagoon, which is rich in crabs.

The women crab catchers are very enthusiastic about the idea of crab cultivation. Because it can lighten the burden and save their work time with more certain results, and better quality crabs.

The residents of Bolano Barat hope that the boundaries of their territory will be mapped and can be known by other villages which are generally inhabited by migrants who work as fish farmers. They hope that their territory can be managed by themselves and protected.

I. Justification For Funding Request

118. This project conducts interventions to enhance the effectiveness and adaptive capacity of communities to climate change through the optimization of land, coastal, and marine areas. As a key component, it is expected to reduce the vulnerability levels of gender-based and millennial communities to the impacts of climate change. Changes in the Sulawesi neck eco-region. From a biophysical perspective, given the topography and the extensive and dispersed investment area, support from the AF in the form of grants will be greatly helpful in achieving the project's goals as planned. Funds will be allocated for all major project activities to realize climate change adaptation actions in the Neck of Sulawesi eco-region.

No	Program Components	Baselines	Plus (with AF)
1	Improving access to resources for sustainable climate change adaptation at the village level.	Administrative documents are incomplete training has been carried out well risk: cadres cannot put into practice the results of the training within the project period	 1 Document Minutes (province and 15 villages) supporting climate action 70% capacity 30 cadres increase and have skills Registration of 100 ProKlim Villages, and Strengthening and Facilitation of Climate Change Adaptation Plans in 15 Villages 70% capacity 30 cadres increase and have skills Village Action Plans and

			SK ProKlim groups in 15 villages
2	Environmental improvement through strengthening social forestry, rehabilitating critical areas, and proposing the establishment of new protected areas	 Overlaps with other management permits political obstacles from regional governments (Pemda and DPRD) in Determining new protected areas Limited use of technology and tools slows down the process 	 1000 Ha of social forestry area managed sustainably (4 new PS decrees and 4 PS management work plans) SK Marine Protection Area in 2 Area 10 ha PS area rehabilitated with Multi Purposes Tree Species) 10 ha of critical mangrove land was planted 50 women were involved in planting mangroves 1 Ha of critical coral reef
3	Social and economic resilience through livelihood improvement	 Lack of community knowledge and capacity regarding micro-enterprise development business actors' lack of confidence that adaptive businesses will be profitable fishermen are not sure about the knowledge provided 	 6 groups 10 products superior 300 Ha Area of Successional Agroforestry Management 70% of the number of fishermen who took part in the training
4	Provision of instruments and regional policies aimed at reinforcing adaptation efforts and securing the long-term sustainability of the program	 there is no policy yet risk: a political situation that hinders the process policy preparation There is no working group yet risk: a political situation that hinders the policy formulation process climate change action plan is underway risk: the action plan is not completed according to the existing deadline 	 2 policies (1 in each regency) 2 Decrees on the Establishment of the API Working Group 2 Regional action plan documents 2 events and 10 products Knowledge Information Education (KIE) in the form of campaign materials, media releases and video documentation

Tabel 13. Justification for Funding Request

Component Improving access to resources for sustainable climate change 1: adaptation at the village

119. **Baseline** (without AF): Without AF, efforts to realize Component 1, which includes enhancing village access through the establishment of pro-climate villages (15 villages), and improving access and availability of Climate Knowledge and Information supported with the provision of maritime information system instruments, will be difficult to achieve. As previously

- explained, communities and governments currently do not even have information about the climate vulnerability they are experiencing, even in villages with very vulnerable status. In such a situation, of course, not much can be expected to be done to increase adaptive capacity.
- 120. Additionally (with AF): Through AF support, the acceleration of growth and development of community adaptive capacity through the Development of ProKlim Villages and the availability of knowledge, information, and ownership of early warning technology will be realized more quickly. This scheme will be jointly supported by competent local managers and backed by policies and various stakeholders. Ultimately, community adaptation will strengthen and make them less vulnerable to climate change. There will be 100 new villages registered as ProKlim villages in the National Registration Site, and 15 of them will be accompanied and strengthened as pilots.

Component Environmental improvement through strengthening social forestry, rehabilitating critical areas, and proposing the establishment of new protected areas.

- 121. Baseline (without AF): Without AF, the current situation will continue, with an increasing trend due to the rising ecological challenges in the Neck of Sulawesi eco-region, including its connection with the National Capital. The current situation is characterized by periodically increasing deforestation, including the conversion of mangroves into shrimp farms, which also contributes to the destruction of coral reefs. From a socio-economic aspect, the current situation is marked by an increase in poverty rates and a significant decline in the production of key commodities since 2017. This is exacerbated by increasing disasters of floods and landslides triggered by very heavy to extreme rainfall. This situation will further increase vulnerability, endangering communities already highly vulnerable to climate change.
- 122. Additionally (with AF): The scenario featuring AF support suggests that the land, coastal, and oceanic areas will form a functional system. Donggala District, known for having the most significant number of fishermen in Central Sulawesi, will significantly contribute to the province's marine fishery production. Similarly, the mangrove areas will improve and can support the aquaculture system in coastal regions. Forest cover has the potential to increase in quality, with future economic prospects through the increase of productive tree populations. This will enhance the assets of poor households. With such conditions realized, community welfare can lift them out of climate vulnerability.

Component 3: Social and Economic resilience through improving livelihoods

- 123. **Baseline** (without AF): Poor households and vulnerable groups have limited opportunities to improve their economic status. Overall productivity in the region is declining, further reducing job opportunities. This is exacerbated by rising consumption costs due to inflation, and an economy still recovering from the Covid-19 pandemic. The local government is currently not sufficiently equipped to effectively rejuvenate the community's economy. This is evident from the ineffectiveness of alleviating poverty. Additionally, the government's financial capacity is weakened due to refocusing and a decrease in local budget (APBD) revenue due to lower realization of national income.
- 124. Additionally (with AF): Managerial, technical, and financial support from AF will serve as a stimulus for poor households and vulnerable groups to start productive ventures, enabling them to help themselves. Enhanced living capabilities will increase their adaptation capacity and simultaneously reduce the vulnerability of poor households and vulnerable groups to the impacts of climate change.

Component 4: Provision of instruments and regional policies aimed at reinforcing adaptation efforts and securing the long-term sustainability of the program

- 125. **Baseline** (without AF): Without AF support, local wisdom will continue to deteriorate. The community's knowledge and understanding of climate change are insufficient, heightening their vulnerability. Furthermore, the likelihood of the community's climate change action plans being realized in the future is doubtful without AF support.
- 126. Additionally (with AF): AF support will enhance the community's **preparedness** to adapt to climate change. The establishment of climate schools, business networks among millennials, and the presence of climate change adaptation action plans will ensure the sustainability of the outcomes achieved by the project components. This will ensure that ProKlim and Village Forest initiatives have a positive impact in the future.

J. Sustainability of Project Outcomes

- 127. The sustainability scenario of the program is established from the village level up to the district level. At the village level, sustainability is driven by the functioning ProKlim Village institutions. These institutions have mechanisms for planning, budgeting, implementing, and evaluating activities. They are responsive and dynamic, capable of addressing and solving continuously evolving problems over time. These institutions rely heavily on the community's leading role, which enhances understanding and achieves increased organizational capacity and management of climate change.
- 128. At the district level, sustainability is assured through the active engagement of the functional Climate Change Adaptation Working Group (Pokja API). This is propelled by cross-sectoral and multi-stakeholder elements. The Pokja API's agenda is outlined in the Regional Action Plan for Climate Change Adaptation (RAD API), which has been integrated into regional policies. Similarly, the Village Action Plan (RAD desa) is integrated into village-level policies.

Financial Sustainability

129. This project aims to establish institutions ranging from the village to the district level. These institutions are designed to be integrated into the local and village governments, ensuring that the adaptation action agenda outlined in the Regional Action Plan (RAD) and Village Action Plan (RADesa) is a government initiative. These initiatives are to be collaboratively carried out, involving multiple sectors and stakeholders, and coordinated by the Working Group on Climate Change Adaptation (Pokja API) at both the regional and village levels. The institutional framework and financial responsibilities are governed by regional and village regulations, which also establish and define the Pokja at each level. Financial support can take the form of funding, facilities, or programs. Support in the form of programs/activities is usually more flexible and extensive; these are oriented towards achieving measurable local adaptation goals and objectives. Technically, such programs can be implemented in every local government organization or institution that is part of the Pokja. Financial sustainability can also be achieved through community fundraising, involving the private sector through CSR initiatives, or by developing creative events for community contributions. All these scenarios are reliable and can be implemented by functional institutions.

Institutional Sustainability

130. Institutional sustainability is achieved by emphasizing the role of working groups at both the village and district levels. Institutional sustainability is prepared from the outset with long-term objectives in mind. It is built by assembling a committed and capable management team. This is achieved and nurtured through intensive interactions, systematic capacity building, and an environment that encourages critical and open learning. Additionally, institutions will be supported by the development of detailed and practical organizational work mechanisms. These mechanisms also define the type and scale of responsibilities for each management aspect, as well as a system for accountability and regular evaluations. These evaluations assess organizational performance and efforts towards achieving organizational goals, thereby enhancing adaptive capacity.

Environmental Sustainability

131. Project implementation will be carried out with sufficient effort to minimize the decline and pressure on environmental quality at any level. For example, waste management, water conservation, reducing pollution, and ensuring that there is no destruction of natural ecosystems. These efforts are continuously socialized and become the principles of organizing activities. With the hope that in the long term it can become a habit and culture. Overall, this program will contribute to ecosystem improvement and increasing the capacity of ecosystem protection. The results of the project in the form of regenerative agriculture, agroforestry, coral cultivation, mangrove restoration and the determination of reserved areas will ensure sustainable environmental improvement and protection.

Post-project, the sustainability of the project results will be guaranteed by the transfer of responsibility and management roles to the government and community through the provision of institutions and regulatory instruments. Institutions at the site level are LPHD (Village Forest Management Institution), KTH (Forest Farmer Group), and technical organizing groups such as KUPS (Social Forestry Business Group). In the marine and coastal sector, the Youth and Fishermen Group will be transformed into POKMAWAS (Community Monitoring Group) which will collaborate with the KKP and Polairud Office to ensure that coastal and marine protection continues. The village government will provide regulatory instruments in the form of Decrees (SK) and Perdes to determine institutions and ecosystem protection protocols. This regulation also allows the village government to allocate village budgets (APBDesa) to support the implementation of protection activities. At the government level, environmental sustainability instruments are supported by the RAD API policy, which is implemented by the POKJA API institution. This policy will provide direction for the preparation of ecosystem protection planning and programs and strengthening adaptive capacity. The Regional Regulations that are stipulated allow the implementation of programs and financing sourced from the APBD to be allocated after this project is completed. Thus, the responsibility for environmental sustainability can be transformed inclusively to cross-actors and is multi-party.

K. Overview of Environmental and Social Impacts and Risks as Being Relevant to the project

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

Tabel 14. Environmental dan Social Principle Potential impect dan Risk

- 132. This project focuses on Capacity building, community livelihoods, increasing protection and restoration of terrestrial and aquatic ecosystems, and strengthening climate change adaptation policies at the village and district levels. The activities and outcomes of this project have a low likelihood of causing adverse environmental and social impacts. This project is low risk, small in number, small in scale and not widespread, and is easily mitigated.
- 133. Gender, Indigenous People, Marginalized, Vulnerlability Contex
- 134. Initial assessments related to gender, vulnerability and indigenous peoples policies have been conducted in 15 project villages. With the following results; the ratio of men to women is 51.48% compared to 48.51%, with the number of men 11,919 and women 11,230.

The impact of climate change is different, on women and men. Likewise with adaptive capacity. Women are more vulnerable, with lower adaptive capacity. Climate change has increased the scale of gender inequality, from all aspects; subordination, marginalization, double burden, violence and stereotypes. The longer dry season on the West Coast of the Sulawesi Neck makes it difficult to access clean water sources, which is related to women's domestic roles. In fishing households on the East Coast of the Sulawesi Neck, the intensity of bad weather, characterized by strong winds and high waves has reduced the operating time of fishermen at sea. This cumulatively results in a decrease in the productive time of male fishermen, and household income levels. This results in the shifting of the burden of production

- to female fishermen as fishermen collecting marine biota in tidal areas, with results such as; shellfish, octopus, shrimp and crab. The decline in productivity also increases the stress level of male fishermen which triggers KGBS (Gender and Sexual Based Violence) in households.
- 135. Climate change has also increased the risk of shipping accidents, due to increased bad weather at sea. This occurs in Donggala and Parigi Moutong. Because this area is flanked by two water systems, namely the Makassar Strait and Tomini Bay, which create high climate variability. Along the East and West coasts, there is a term "widow's wind". This term is used to name the fierce west wind season, which blows in September December. Although this term sounds sarcastic, it is not actually intended that way. This term contains a tragic event, which is related to the many fishermen who are lost or die due to accidents at sea, making their wives widows. Climate change has extended the period and intensity of the "widow's wind" an environmental change that shows how women's welfare is greatly affected by climate change.
- 136. Gender relations in the social and cultural structure of society in this region are patrilineal-patriarchal. This relationship applies to both migrant and indigenous peoples. In this relation system, the kinship system determines the lineage from the father (male), and children will connect themselves with their father. In this case, gender will determine the genealogy and identity of the family (exmp: use of the father's surname), distribution of inheritance rights. While in social relations, men are placed as the holders of power and primary authority, so that men dominate in various public aspects.
- 137. In the context of indigenous peoples, an initial assessment has been conducted and identified 5 indigenous communities; the Balaesang, Bajo, Lauje, Kaili and Bolano Indigenous Peoples, spread across 7 target villages, namely; Rano Village, Manimbaya Village, Pomolulu Village, and Labuan Toposo Village, Donggala Regency, and West Lombok Village, Pebounang Village, Dusunan Village, and West Bolano Village, Parigi Moutong Regency, with a population of 11,355 or 49% of the total population.
- 138. The UN Declaration on Declaration on the Rights of Indigenous Peoples (UNDRIP) of 13 September 2007, describes Indigenous Peoples, with characteristics including; self-identification; historical continuity (before being invaded by colonial powers); original population (history); spiritual relationship with land and customary territory; distinctive identity (language, culture, beliefs); and distinctive socio-political and economic systems.
- 139. In the Indonesian government regulation, namely Permendagri No. 52 of 2004, Concerning Guidelines and Protection of Customary Law Communities, Customary Communities are explained as; "Customary Law Communities are Indonesian Citizens who have distinctive characteristics, live in groups harmoniously according to their customary laws, have ties to ancestral origins and/or the same place of residence, have a strong relationship with the land and the environment, and have a value system that determines economic, political, social, cultural, legal institutions and utilizes a certain area from generation to generation"
- 140. Climate Change has increased the risk of failure of the land use system in indigenous communities, especially food crop farming land. Extreme weather and changing seasonal patterns, and not in accordance with the traditional calendar have resulted in errors in agricultural planning, especially in determining planting times. This has an impact on decreasing production, even crop failure. The failure of intensive agriculture, encourages an increase in the need for land, and the utilization of forest products. In a situation of overlapping forest control claims, this tendency has triggered forest area tenure conflicts. This project allocates resources and approaches that enable women, vulnerable groups and indigenous peoples to gain opportunities to increase participation, increase capacity and reduce vulnerability from social, economic and environmental aspects, through the development of

policy instruments and regulations at the village and district levels, increasing capacity through priority participation in workshops, training, field schools and mentoring, livelihood development, increasing access to natural resources legally and restoration of terrestrial and aquatic ecosystems.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Arrangement for Project Implementation

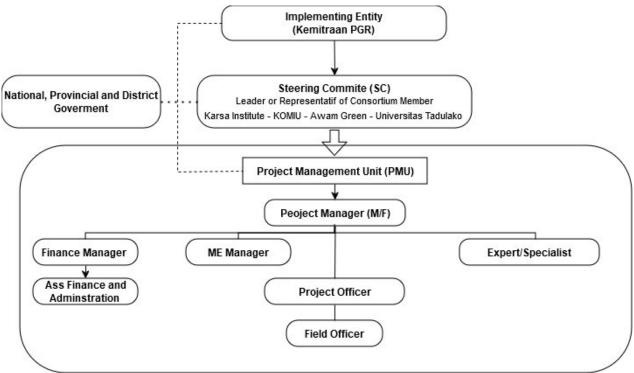


Figure 9. Consortium Structure

- 141. The Implementing Entity of the project will be the Partnership for Governance Reform in Indonesia (Kemitraan) and the Executing Entity will be Consortium KUAT. consortium; lead by Karsa Institute, while Yayasan Komiu, Yayasan Awam green, and UNTAD (Universitas Tadulako) are consortium members.
- 142. Karsa Institute and the consortium members will establish a Steering Committee (SC) and a Project Management Unit (PMU). The Steering Committee (SC) and representatives of the national and local government and will oversee the entire Project implementation to ensure that project results are achieved and contribute to the Adaptation Fund Strategic Result Framework. The SC will provide technical guidance for the PMU for the Project implementation. The SC will hold regular meetings to evaluate the performance of the PMU.
- 143. The Executing Entity will be responsible for managing the execution of project activities, responsible for achieving target indicators and financial disbursement. The main role of the executing entity includes preparing work plan and annual budget, M&E tools and guidelines, ESMP, SGIP and other Stakeholder Engagement Plan; development of communication protocol, recruitment of Project Management Unit (PMU) staff and coordination arrangement with the Steering Committee. The Executing Entity will establish and oversee the PMU in executing project activities, managing sub-projects, monitoring and evaluation and financial disbursement monitoring.
- 144. The Project Management Unit (PMU) will be led by a Project Manager and supported by Finance Manager, Project Officer, M&E Officer, Consultants/Specialists (include gender

Specialists) and other project staff.

145. The project structure will pay attention to gender balance. By providing opportunities for women to be involved in the project structure in any position. Affirmatively, the project will ensure that at least 30% of the project-implementing staff are women

Position	Roles and Responsibilities
Project Manager	 Prepare an annual work plan and provide guidelines for consultants/experts and project staff to execute the work plan Prepare TORs for project consultants/expert reviewing the ToR of Activities Provide inputs on the project budget Ensure achievement and quality of project results. Oversee the implementation of project activities and ensure compliance with project guidelines. Responsible for preparing project progress reports and final report; and ensuring good quality of project activity reports. Ensure and maintain project teamwork Develop coordination with the local government and other stakeholder Provide regular updates to the steering committee and donors when
Finance Manager	 required Responsible for the overall operations of the project, including developing guidelines and SOPs for project staff. Work with the Project Manager to prepare the annual budget. Monitor budget disbursement and prepare financial reports. Ensure operational and administrative support to consultants/experts. Supervise procurement of goods and services. Manage project administration documents. Coordinate the work of the administration and finance team Provide periodic reviews and assessments of the financial position and status to the PM Prepare financial reports respond to financial audits and audits by KAP
Project Officer	 Leading the implementation of activities and supervising the quality of activities and results of activities (in collaboration with the Project Manager and project team). Preparing all activity ToR and reports related to the project. Preparing and implementing work plans with the team. Coordinating with related parties in the implementation of project activities. Assisting the Project Manager in the daily operational work of the project. Reporting the progress of project implementation to the Project Manager. Ensuring that all administrative, procurement, and financial tasks are completed on time (together with the Administrative and Finance Assistant) Together with the Monitoring, Evaluation and Learning Officer, developing and maintaining project records such as databases, reports, and decision records. Ensuring that project-related documents are archived in accordance with project requirements
M&E Manager	Develop M&E strategy and plan. Lead M&E supervision missions. Document project progress vs target indicators

	·
	- Ensure compliance of ESMP and SGIP.
	- Assist the Project Manager in preparing progress reports.
	- Provide guidelines for project evaluation.
	- Ensure alignment with government regulations
Field Feeiliteten	- Develop coordination and communication with the local and village
Field Facilitator	- Organize the implementation of project activities at local and village levels.
	- preparing a schedule of activities in the field
	- being a liaison between management and the village
	- recruiting village cadres, as well as being a study partner for village cadres and local champions
	- government and other stakeholders for smooth implementation of project activities.
	- Facilitate workshops, training, FGDs, informal meeting, community mapping, with local stakeholders and communities/villages.
	- Provide technical facilitation for EbA and livelihood activities.

Tabel 15. PMU Position, Roles and Responsibilities

B. Financial Risk and Project Management

146. The project consists of four components that will contribute to economic, social, and environmental benefits. A range of activities will be implemented, including agroforestry, silvofishery, coastal and land rehabilitation, education and capacity building, and ecosystem optimization of forests. All these activities will be synergized and reinforced through the strengthening of inter-sectoral policies to ensure the sustainability of various climate change adaptation efforts.

Category	Potential Risk	Level	Mitigation Strategy
Financial	Changes in exchange rates will lead to changes in budget elements and impact on the activities and professional plans offered by the budget.	Low	-The policy of determining the percentage of budget changes adjusted to changes in exchange rates with an estimate of 5-10% -Use of local currency (IDR) at the excecuting entity level
Institutional	1. Changes in the Regional Apparatus Organization, especially due to the separation of the Ministry of Forestry and Environment in the structure of the Republic of Indonesia Government Cabinet after the 2024 Presidential Election.	Low	1. The Red and White Cabinet formed by the new President includes the separation of several ministries and the formation of new ministries and agencies. Specifically for the environment and forestry, it has become 2 ministries, with climate change affairs divided, based on the type of contribution, it is likely that the FOLU aspect will remain
	2. Regional Government is Late in issuing Regional Regulations (PERDA) on the determination of Protected Areas	Medium	the domain of the Ministry of Forestry, the Ministry of Environment will handle other aspects. However, overall the climate crisis problem will be under the Ministry of Environment. In the

- regions (sub-national) this problem will not have too broad an impact, because the Forestry and Environment Services have always been separated, even though the Ministries are united. After this, the two Services will wait for a more detailed division of authority, especially regarding climate affairs.
- 2. The Decision to Issue a Regional Regulation is a political process that depends on the relationship between Regional Head the DPRD. (REGENT) and the Therefore, to ensure that both authorities are willing to schedule, discuss and determine the Decision related to the establishment of a new protected area, communication and literacy development for key actors must be carried out from the start. By distributing knowledge materials, and also involving key actors in various activity events involving the community, so that the project agenda will be internalized into their policy agenda.

In addition, transforming this need as a community aspiration will also be carried out, because one of the responsibilities of the key actors is to answer/fulfill community aspirations.

The communication development process will be carried out from the through continuous start coordination. discussion and information sharing with the Regent and DPRD so that they are updated on project developments, and can map out the roles that will be carried out. Thus, they have the enthusiasm to play a role by issuing a PERDA to determine the Protected Area and other policies that are needed.

Social	Community involvement in several action programs does not address gender orientation equity	Medium	It is mandatory to guarantee the participation of women in every assembly and the actualization of training in the field (affirmation action)
Environment	There is use of physical space for aquaculture through the installation of floating nets and crab balls in coastal and marine areas	Low	The placement of floating nets and crab ball installations is carried out through agreement between coastal and marine area users, adjusted to the WPP 715 zoning and local traditional wisdom

 Table 16. Analysis of Financial and Management Risk

C. Environmental and Social Risk Management, In line with the Environmental and social policy and gender policy of the Adaptation Fund.

147. The following is an assessment of compliance with the Adaptation Fund Environmental and Social Policy and measures for environmental and social risk management:

ESP Principles Description of Risk	Risk Mitigation Strategy
Compliance with Law	
 The authority to set boundaries for Forest Areas is the authority of BPKH, through the boundary committee as regulated in the Regulation of the Minister of Environment and Forestry No. P.93/Menlhk/Setjen/Kum.1/12/2016 concerning the Forest Area Boundary Committee. The government has designated social forestry as a forest area with special management, based on the Regulation of the Minister: Environment and Forestry Number 4 of 2023 concerning Social Forestry Management in forest areas with special management. One of its special aspects is the boundary arrangement that can be carried out by the community as the permit holder. Thus, the community can regulate its own zoning, including establishing protection zones within the Social Forestry area. (Risk: Negligible) 	 Project management will intensively coordinate with BPSKL, BPKH, KPH, Forestry Service and POKJA PS (Social Forestry Working Group) of Central Sulawesi. Increasing the involvement of the parties, in the process of applying boundaries with the community as part of participation, accountability of the process and affirmation of community efforts. Specifically, for BPKH. BPKH staff will be involved as resource persons for boundary training, and technical assistants for the boundary process.
 There are 2 Regulations related to coastal and marine management, these regulations will relate to all project activities and outputs related to the determination of MPA, Mangrove and Coral Reef Restoration and SSF. Namely; (1). Regulation of the Minister of Environment and Forestry No. 48 of 2014. Concerning Procedures for Implementing Ecosystem Restoration in Nature Reserve Areas and Nature Conservation Areas. Concerning this regulation, all activities carried out must be in accordance with the Area Management Plan Document and through the approval of the 	 The coastal and marine management procedures based on KKP Regulation No. 24 of 2016 are not restrictive, especially for the purpose of protecting and preserving the ecosystem. In addition, the regulation suppresses community participation. Nevertheless, management will certainly conduct intensive communication with the Related Agency. 1 presentation session at the Agency office will be prepared to explain the technical

Relevant UPT.

The second regulation is (2). Regulation of the Ministry of Marine Affairs and Fisheries (KKP) No. 24 of 2016 Concerning Procedures for Coastal and Small Island Rehabilitation.

Although it regulates the same object (ecosystem type), these regulations do not overlap because they apply to areas with different statuses/functions. The first regulation is in conservation areas, while Permen KKP No. 24 2016, applies outside conservation areas. Based on the review of the conservation area and waters map, the project location is not in a conservation area, and is included in the fisheries management area or WPP. The Tomini Bay and Makassar Strait areas that are the intervention areas of this project are codified as WPP 715 and WPP 713. Thus, coral reef rehabilitation activities in this project refer to KKP Regulation No. 24 of 2016. (Risk: Negligible)

plan for rehabilitation, protection and strengthening of SSF. Furthermore, involvement will be carried out through various relevant events and implementation of actions

Access and Equity

Elite Capture, is a situation where a group of actors, because of their higher level of education, or because of their social status (nobility), or because of their higher economic status and especially because of their position as government officials (Village Head) have the ability to drive the decision-making process in the village. In the context of the project, this poses a risk in determining the list of beneficiaries of economic business assistance. In many cases, village officials usually prioritize beneficiaries from their family, colleagues, or even people who have political affiliations with them. This can have a direct impact on the achievement of project objectives, where the project's target to empower more vulnerable communities may not be achieved. (Risk: Medium)

- Project management, both PM, and especially PO and Field Facilitator are obliged to communicate the project objectives, both textually and philosophically. Project objectives must be able to be connected and transformed as efforts related to government responsibility in improving community welfare.
- The beneficiary recruitment mechanism must be based on clear boundaries and categories with easily understood indicators. The mechanism must be published so that it is known by many people;
- Recruitment must be carried out openly and participatory, involving figures, representatives of vulnerable communities and the village government. The DTKS database is used as a baseline, but decisions must be made through joint assessments based on indicators.
- Draft List of beneficiaries by name by address must be verified through ground checks.
 Management must dare to name inappropriate names, including those included on the recommendation of the village government.
 (After Mitigation Risk level: Low)

Marginalized and Vulnerable Groups.

The direct beneficiaries of this project are vulnerable and marginalized groups, Women/Female Headed Households, Persons with Disabilities, Adolescent Girls, Indigenous Peoples and households with extreme poverty levels.

 An affirmative approach with regulation and quota determination will be applied. Followed by increasing the capacity of vulnerable and marginalized groups. On the other hand, increasing community understanding, especially key actors, of GEDSI will be carried out through The participation of marginalized and vulnerable groups in strengthening climate resilience including sustainable livelihood activities and increasing access to natural resources will be prioritized. The project will identify marginalized and vulnerable groups in the project sites.

Access and Participation of vulnerable and marginalized groups are often hampered by structural, social and cultural factors. The project must ensure to improved access and reduce barriers so that efforts to strengthen vulnerable and marginalized groups can be effective.. (Risk: Medium)

GEDSI training and education in all villages.

- Project management must ensure and condition every aspect of project implementation to be friendly to vulnerable and marginalized groups.
 This must be done at the technical level and in as much detail as possible. So that it will involve appropriate calculations related to the selection of time, determination of place, arrangement of place, and provision of family-friendly activity atmosphere.
- As a safeguard, the Project prepares and implements a social-gender inclusion plan (SGIP). (After Mitigation Risk level: Low)

Human Right

The project does not trigger human right issues (Risk: Negligible).

Gender Equality & Women's Empowerment

The results of the gender assessment suggest that women, their adaptive capacity and level of vulnerability to the adverse impacts of climate change are different. Women have lower adaptive capacity and higher levels of vulnerability. The assessment results also show that climate change has increased the level of gender injustice and worsened existing gender inequalities.

Social and cultural conditions, as well as habits, and relationships within the household, are at risk of forming inequality in women's access and participation in the project. While the project is committed to increasing access and benefits that can be obtained by women, considering their greater capacity needs and challenges in overcoming the adverse impacts of climate change (Risk: Medium)

- Affirmative approach with regulation and quota setting will be applied. Followed by capacity building of vulnerable and marginalized groups. On the other hand, increasing community understanding, especially key actors towards GEDSI will be conducted through GEDSI training and education in all villages.
- Capacity building for women will be implemented methodically, including increasing male understanding of gender through male engagement.
- Women's leadership will be encouraged and developed through activity scenarios. For example, women-led mangrove rehabilitation.
- As a safeguard, the Project prepares and implements a social-gender inclusion plan (SGIP). (After Mitigation Risk level: Low)

Core Labor Right

The project does not trigger core labor right issue. (Risk: Negligible).

Indigenous People

Initial assessment results found 5 Indigenous Communities, in 7 villages of the project location. Climate change has increased vulnerability due to decreased production and increased crop failure. This has reduced the ability of indigenous communities to provide food for their families and communities. So that food supplies must be supplied from outside through substitution from the

Indigenous communities are one of the focuses of this project. Which will be intervened through mentoring and organizing, mapping areas, and strengthening indigenous institutions.

Sustainable land use practices based on traditional agroforestry will be introduced or developed. Livelihood improvements will be carried out through economic development, and

marketing of commercial crops (gardens) and climate literacy will be carried out through climate forest products. Crop failures also encourage land schools. extensification and utilization of forest products. both wood and non-wood. This also creates a new To mediate conflicts, indigenous communities will tendency in the form of a shift in livelihoods from be facilitated with social forestry schemes, so that on-farm to off-farm. the use of forest resources becomes legal, and a sustainable management system. Land extensification and utilization of forest (After Mitigation Risk level: Low) products increase the potential for tenurial conflicts between indigenous communities and the government. (risk: Medium) **Involuntary Settlement** The project does not trigger any involuntary settlement. (Risk: Negligible) Protection of Natural Habitats Activities will focus on establishing new protected The project encourages the establishment of a sustainable community-based natural resource areas on land and water (MPA), restoring coral reef and mangrove ecosystems, and improving the management system. Which is guaranteed by the availability of institutions and policies at the quality of land cover other than agroforestry. village and district levels. This mechanism delegates the role and responsibility of natural resource management to local governments and communities. Part of the management also includes the utilization of ecosystem goods and services such as clean water, ecotourism and sustainable aquaculture. Conservation of Biological Diversity This project will not result in a decrease in - The project will develop a forest resource biodiversity, or have a negative impact on management plan in the social forestry work area endangered, vulnerable, and protected species. in the form of RKPS (social forestry work plan) Instead, this project has the potential to increase and RKT (annual work plan) which will be the the scale of protection for habitat and biological basis for business groups to carry out controlled utilization efforts by considering potential. In diversity through the restoration of coral reef and addition, the project will also assist SF permit mangrove ecosystems, which can support the protection or improvement of other ecosystems. holders to organize PS area management such as seagrass beds. through a zoning system, to ensure protection and rehabilitation in the SF area. - The project will introduce the Code of Conduct Promotion of the utilization of forest and water Responsibility Fisheries, to SSF, including resources may have an impact on certain ecosystems and species, such as non-timber introducing protected fish species and treatment forest products (NTFP) (Rattan, Bamboo, of bycatch. Mushrooms), or marine biota such as fish, crabs, (Risk: Low) octopus. However, the utilization of fast-growing NTFPs, in reality, has a less significant impact on ecosystem sustainability. Likewise, fishing by traditional fishermen. (Risk: Low) Climate Change The project does not triger Climate Changet. (Risk: Negligible) Pollution Prevention and Resource Efficiency

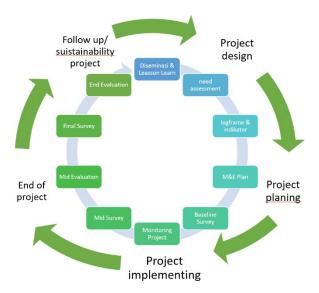
The project does not triger this principles. (Risk: Negligible)	
Public Health	
Project activities do not trigger public health issue	
Physical and Cultural Heritage	
Project activities do not remove or trigger negative impact on cultural heritage. The project will strengthen customary law to protect natural resources. (Risk: Negligible).	
Lands and Soil Conservation	
Project activities do not have negative impact on land and soil conservation as project activities will not cause land/soil erosion. (Risk: Negligible).	

Tabel 17. Environmental and Social Risk Management, and AF ESMP.

D. Monitoring and Evaluation Arrangement Including budgeted M&E plan.

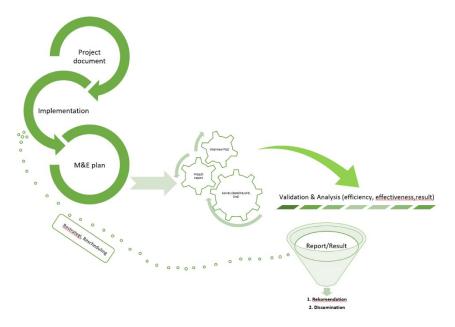
- 148. Monitoring and Evaluation (M&E) will follow a framework that takes into account various components; these include Outcome, Output, Approach, Indicators, Activity Implementation, Provision of Verification Tools, and Financial Usage. The data and information components used in analysis and evaluation encompass:
 - Compliance. M & E assesses whether the actions of administrators, staff, and all involved parties adhere to established standards and procedures.
 - Auditing. M & E determines whether resources and services provided to project targets have been delivered effectively.
 - Accounting. M & E provides information that helps in understanding the social changes resulting from the implementation of existing wisdoms after the project.
 - Explanation. M & E produces information that helps explain how and why the results obtained differ from the expected outcomes.
 - Monitoring and evaluation are conducted through planning stages, implementation phases, and reporting stages, which include field reports and periodic progress reports consisting of; Monthly Reports, Quarterly Reports, Annual Reports, and Final Reports
- 149. Monitoring and evaluation will ensure, compliance with all laws and national technical standards, project partner policies, compliance with the Adaptation Fund Environmental and Social Policy and the Gender Policy of the Adaptation Fund, which has been outlined in the Environmental and Social Management Plan (ESMP), Social Gender Inclusion Plan (SGIP).

In a project management cycle, monitoring and evaluation are an integral part of achieving the objectives of program/project implementation. Monitoring and Evaluation will provide the information needed to assess and guide project strategy, to ensure effectiveness, to meet reporting requirements and to inform future planning. M&E as an integral part of the project management cycle is explained as follows:



Monitoring will be conducted at the 1 month, 3 months, 6 months and mid-program stages to see the process (activities) and program achievements (Output, Outcome) as planned. Monitoring is conducted using the Document Review method, Field Survey, Interview or Discussion of the parties.

Monitoring is directed to see Efficiency, Effectiveness and Results. The results of monitoring and evaluation can be used as learning materials used for improvement or development in other places so that the results of monitoring and evaluation obtained will be reported periodically to related parties: Adaptation Fund, Partnerships, and Stakeholders in the region. The flow of Monitoring and Evaluation Implementation that will be carried out in this program is as explained in the picture below. (Monitoring and Evaluation Plan in the Annex)



150. M&E component budget of the project is as follows:

Kegiatan	Targets	Biaya (\$)	waktu
Initial project survey	Outcome, output indicator targets	\$ 2.000	Beginning of Proyek
Mid-project survey	Outcome, output indicator targets	\$ 2.000	Middle of proyek
Final project survey	Target indicator outcome, output	\$ 2.000	End of Proyek
Submission of reports, interviews, PMU FGD	Process, milestones, efficiency, effectiveness, results	\$ 800	Once in a month
Monitoring and Evaluation Workshop	Process, milestones, efficiency, effectiveness, results	\$ 1.200	Six month
Internal Audit	Management	\$ 5.000	Annual

Tabel 18. Cost of M&Eand ESMP.

E. Result Framework

Outcome/Output	Indicator	Baseline	Target	Source of Verification	Risk and Assumption
Component 1: Imp	roving access to re	esources fo	r climate change ad	aptation sustainabili	ty at the village
Outcome 1.1 Increase in village access through the establishment of ProKlim villages	- Number of pro- climate Villages	0	15 villages	Receipt of proposal climate village document by Ministry of Environment and Forestry (MoEF)	Incomplete administrative documents
Output 1.1.1: Stakeholders' commitment to ProKlim villages	- Minutes of meetings	0	1 Document (province and 15 villages)	Minutes of meetings document signed by all stakeholders	Disagreement among participants
Output 1.1.2: Village Policies for Climate Change Adaptation and ProKlim Group Initiatives formulated.	- The Document Proposal of proklim village is prepared in full and signed by the village head - Proof of registration in the national registration system (SRN) for 100 villages - 15 Decree on the Establishment of ProKlim Group Management		- 100 villages in the neck of Sulawesi meet ProKlim registration requirements through SRN (National Registration System) - Village planning of Village Action Plan and decree for ProKlim groups in 15 villages	document - Head of Village regulation document	 Drafting of village regulations constrained by district legal department approval The preparation of the Decree is hindered by administrative issues and agreements

	[_				
Output 1.1.3 Proposed of proclimate villages in Donggala and Parigi Moutong	- Number of proposed pro- climate villages	0 ProKlim Villages - 0 have been enumerat e - 0 have been verified	 100 villages registered ProKlim villages via SRN 15 villages were assisted as ProKlim pilot villages 	Proposal document for 15 pro-climate villages - Group decision letter Visual documentation	
Outcome 1.2 Increase in knowledge about adaptation and climate information circulation	- Percentage of cadre participants in field school able to practice climate change adaptation actions and conduct environmental monitoring	0	70%	Evaluation report	Cadres unable to practice training results within project timeframe
Output 1.2.1 Increased access to environmental condition knowledge and information through cadre training in 15 villages	- Number of trained cadres in 15 villages	0	30 cadres	Training and monitoring report	Limited tools reducing training effectiveness

Component II: Environmental improvement through strengthening of social forestry, rehabilitation of critical areas, and proposing new protection areas

Outcome 2.1: Better management of social forestry in the Neck of Sulawesi	- Total area of social forestry area managed sustainably	0	5,000 Ha	Monitoring report	Overlap with other management licenses
Output 2.1.1: Increased access to Social Forestry and revitalization of Social Forestry access holders Increased access to Social Forestry and revitalization of Social Forestry access holders	Forestry groups receiving capacity building	- 6 existing PS areas covering 4693 Ha - 0 New PS	 Utilization of 6 existing PS areas covering 4693 Ha 2 Proposed social forestry covering an area of 3836 hectares with verification status, received a decision on determination Availability of 8 RKPS and RKT PS documents with an orientation to climate change adaptation 	New Social Forestry Decree document, Management work plan document	Activity not a priority of the institution
Output 2.1.2: Zoning of Social Forestry area	- Area designated as Social Forestry zoning	0	5,000 ha	Zoning map	Activity not a priority of the institution
Outcome 2.2: Sustainable management of	- Number of villages with new protection areas	0	10.8 Ha	Marine Protected Area decree in 10 villages	Political obstacles from local government in

Marine Protected					dofining now
Area (MPA)					defining new protected areas
Output 2.2.1: Identification and zoning of Marine Protected Area - Field identification -Village consultation		0	10.8 Ha	 Proposed conservation area map Attendance Activity documentation 	Lack of baseline data from Donggala and Parigi Moutong governments
Output 2.2.2: Drafting of local regulations regarding Marine Protected Areas (MPAs) and/or Essential Ecosystem Areas (EEAs) around the Makassar Strait and Tomini Bay coasts	- 1 Marine Protected Area (MPA) decree 1 draft local regulation	0	1	- Decree document - Draft local regulation document	Dependence on decision- making by KKP3K
Outcome 2.3 Environmental functions in critical land zones are restored	- Area of rehabilitated land	0	 - 10 ha mangrove in 13 Village (130 Ha) - 10 ha coral reef area (2 area) - 10 ha Social Forestry ini 11 Village (110) Ha), 	- Monitoring report	Limited tools- slowing down the process
Output 2.3.1: Rehabilitation of critical lands in Social Forestry area with Multi-Purpose Tree Species	- Area of critical land in Social Forestry area planted with Multi-Purpose Tree Species	0	- 10 ha per village rehabilitation area		Failure to plant due to season exceeding Planting time limits
Output 2.3.2: Increased mangrove rehabilitation area through women's group involvement	 Area of rehabilitated mangrove region Number of women involved 	0	 10 ha critical mangrove land 50 women 	 Planting report Monitoring report + mangrove area map 	Suitability and availability of seedlings
Output 2.3.3: Rehabilitation of critical land in Coral Reef area	- Area of critical coral reef	0	- 150 ha	 Monitoring report of coral reef rehabilitation activities 	Planting media not in ideal conditions

Component III: So	cial and economic	resilience tl	nrough livelihood in	mprovement	
Outcome 3.1:	- Micro	- Village	Micro	- Activity	Limited
Increase in	businesses in 15	potential	business	documentation	knowledge and
micro/small	community-	data	validation still	- Process notes	capacity in micro
businesses with	based villages	- Micro	operational	- Micro business	business
	progress	business	operational	inventory data in 15	
innovative		data in		villages	development
adaptation		each			
		village			
		- Micro			
		business			
		data in			
		Cooperati			
		ves,			
		Small and Medium			
		Enterpris			
		es			
		Departme			
		nt			
Output 3.1.1:	- Number of	0	- 6 groups	Monitoring	Lack of
Development of	business groups		- 10 flagship	report	Confidence
small businesses	with complete		products		Among Business
with adaptive	business				Owners in the
capacity	administration				Profitability of
	- Number of flagship products				Adaptive
	available and				Enterprises
	marketed				
Output 3.1.2:	- Area of	0	300 Ha	Monitoring	
Development of	agroforestry			report	
Successional	managed				
Agroforestry as a	successively				
sustainable land					
use					
alternative					
Output 3.1.3:	- Number of	0	70% of	- Attendance	Fishermen's
Small- scale	fishermen using		fishermen	- Activity	Skepticism
fishermen able to	adaptive		attending	documentation -	Regarding the
utilize adaptive	technology		training	Narrative report	Provided
knowledge and	- And knowledge		· ········•		Knowledge
technology in					
fishing					
and aquaculture					
	ovision of instrume	ents and loc	al policies to stren	gthen adaptation action	ons and ensure
program sustainal	oility of the Program	n		<u> </u>	
Outcome 4.1:	- Number of	0	2 policies (1	Policy	Assumption
The availability of	policies		in each	document	: no existing
climate change	generated by the		district)		policies,
adaptation	district based on		,		
policies at the	POKJA - proposals				Risk: political
district level	- proposals				situation
monitored by the					hindering policy
Climate Change					formulation
Working Group,					
officially					
supported by the					
district					
uiotiiot					

government					
Output 4.1.1: Establishment of Climate Change Working Group in Donggala and Parigi Moutong districts	- Decree on the Establishment of Climate Change Working Group	0	2 Decrees	Decree document	Assumption : no existing Working Group, Risk: political situation hindering policy formulation
Output 4.1.2: Availability of Climate Change Action Plan Documentation for the Donggala and Parigi Moutong Districts	- Action plan	0	2 Documents	Action plan document	Assumption : no existing regional action plans, Risk: political situation hindering policy formulation
Output 4.1.3: Promotion and dissemination of climate change handling actions	- Number of promotion events and Knowledge Information Education (KIE) products produced	0	2 events, 10 products	Campaign material, media release, video documentation	Assumption: : Climate change action plan is implemented. Risk: Action plan may not be completed within the existing deadline

Tabel 14. Result Freamwork

Financial Risk and Project Management

151. The project consists of four components that will contribute to economic, social, and environmental benefits. A range of activities will be implemented, including agroforestry, silvofishery, coastal and land rehabilitation, education and capacity building, and ecosystem optimization of forests. All these activities will be synergized and reinforced through the strengthening of inter-sectoral policies to ensure the sustainability of various climate change adaptation efforts.

Category	Potential Risk	Level	Mitigation Strategy
Financial	Changes in exchange rates will lead to changes in budget elements and impact on the activities and professional plans offered by the budget.	Low	-The policy of determining the percentage of budget changes adjusted to changes in exchange rates with an estimate of 5-10% -Use of local currency (IDR) at the excecuting entity level
Institutional	3. Changes in the Regional Apparatus Organization, especially due to the separation of the Ministry of Forestry and Environment in the structure of the Republic of Indonesia Government Cabinet after the 2024 Presidential Election.	Low	3. The Red and White Cabinet formed by the new President includes the separation of several ministries and the formation of new ministries and agencies. Specifically for the environment and forestry, it has become 2 ministries, with climate change affairs divided, based on the type of contribution, it is likely

4. Regional Government is Late in issuing Regional Regulations (PERDA) on the determination of Medium Protected Areas

that the FOLU aspect will remain the domain of the Ministry of Forestry. the Ministry Environment will handle other aspects. However, overall the climate crisis problem will be under the Ministry of Environment. In the regions (sub-national) this problem will not have too broad an impact, because the Forestry **Environment Services have always** been separated, even though the Ministries are united. After this, the two Services will wait for a more detailed division of authority. especially regarding climate affairs.

4. The Decision to Issue a Regional Regulation is a political process that depends on the relationship between the Regional Head (REGENT) and the DPRD. Therefore, to ensure that both authorities are willing to schedule, discuss and determine the Decision related to the establishment of a new protected area, communication and literacy development for key actors must be carried out from the start. By distributing knowledge materials, and also involving key actors in various activity events involving the community, so that the project agenda will be internalized into their policy agenda.

In addition, transforming this need as a community aspiration will also be carried out, because one of the responsibilities of the key actors is to answer/fulfill community aspirations.

The communication development process will be carried out from the start through continuous coordination, discussion and information sharing with the Regent and DPRD so that they are updated on project developments, and can map out the roles that will be carried out. Thus, they have the enthusiasm to play a role by issuing a PERDA

			to determine the Protected Area and other policies that are needed.
Social	Community involvement in several action programs does not address gender orientation equity	Medium	It is mandatory to guarantee the participation of women in every assembly and the actualization of training in the field (affirmation action)
Environment	There is use of physical space for aquaculture through the installation of floating nets and crab balls in coastal and marine areas	Low	The placement of floating nets and crab ball installations is carried out through agreement between coastal and marine area users, adjusted to the WPP 715 zoning and local traditional wisdom

Table 16. Analysis of Financial and Management Risk

Environmental and Social Risk Management, In line with the Environmental and social policy and gender policy of the Adaptation Fund.

152. The following is an assessment of compliance with the Adaptation Fund Environmental and Social Policy and measures for environmental and social risk management:

ESP Principles Description of Risk	Risk Mitigation Strategy
Compliance with Law	
 The authority to set boundaries for Forest Areas is the authority of BPKH, through the boundary committee as regulated in the Regulation of the Minister of Environment and Forestry No. P.93/Menlhk/Setjen/Kum.1/12/2016 concerning the Forest Area Boundary Committee. 	 Project management will intensively coordinate with BPSKL, BPKH, KPH, Forestry Service and POKJA PS (Social Forestry Working Group) of Central Sulawesi. Increasing the involvement of the parties, in the process of applying boundaries with the
The government has designated social forestry as a forest area with special management, based on the Regulation of the Minister: Environment and Forestry Number 4 of 2023 concerning Social	community as part of participation, accountability of the process and affirmation of community efforts.
Forestry Management in forest areas with special management. One of its special aspects is the boundary arrangement that can be carried out by the community as the permit holder. Thus, the community can regulate its own zoning, including establishing protection zones within the Social Forestry area. (Risk: Negligible)	Specifically, for BPKH. BPKH staff will be involved as resource persons for boundary training, and technical assistants for the boundary process.
There are 2 Regulations related to coastal and marine management, these regulations will relate to all project activities and outputs related to the determination of MPA, Mangrove and Coral Reef	The coastal and marine management procedures based on KKP Regulation No. 24 of 2016 are not restrictive, especially for the purpose of

Restoration and SSF. Namely; (1). Regulation of the Minister of Environment and Forestry No. 48 of 2014. Concerning Procedures for Implementing Ecosystem Restoration in Nature Reserve Areas and Nature Conservation Areas. Concerning this regulation, all activities carried out must be in accordance with the Area Management Plan Document and through the approval of the Relevant UPT.

The second regulation is (2). Regulation of the Ministry of Marine Affairs and Fisheries (KKP) No. 24 of 2016 Concerning Procedures for Coastal and Small Island Rehabilitation.

Although it regulates the same object (ecosystem type), these regulations do not overlap because they apply to areas with different statuses/functions. The first regulation is in conservation areas, while Permen KKP No. 24 2016, applies outside conservation areas. Based on the review of the conservation area and waters map, the project location is not in a conservation area, and is included in the fisheries management area or WPP. The Tomini Bay and Makassar Strait areas that are the intervention areas of this project are codified as WPP 715 and WPP 713. Thus, coral reef rehabilitation activities in this project refer to KKP Regulation No. 24 of 2016. (Risk: Negligible)

protecting and preserving the ecosystem. In addition, the regulation suppresses community participation.

Nevertheless, management will certainly conduct intensive communication with the Related Agency. 1 presentation session at the Agency office will be prepared to explain the technical plan for rehabilitation, protection and strengthening of SSF. Furthermore, involvement will be carried out through various relevant events and implementation of actions

Access and Equity

Elite Capture, is a situation where a group of actors, because of their higher level of education, or because of their social status (nobility), or because of their higher economic status and especially because of their position as government officials (Village Head) have the ability to drive the decision-making process in the village. In the context of the project, this poses a risk in determining the list of beneficiaries of economic business assistance. In many cases, village officials usually prioritize beneficiaries from their family, colleagues, or even people who have political affiliations with them. This can have a direct impact on the achievement of project objectives, where the project's target to empower more vulnerable communities may not be achieved. (Risk: Medium)

- Project management, both PM, and especially PO and Field Facilitator are obliged to communicate the project objectives, both textually and philosophically. Project objectives must be able to be connected and transformed as efforts related to government responsibility in improving community welfare.
- The beneficiary recruitment mechanism must be based on clear boundaries and categories with easily understood indicators. The mechanism must be published so that it is known by many people;
- Recruitment must be carried out openly and participatory, involving figures, representatives of vulnerable communities and the village government. The DTKS database is used as a baseline, but decisions must be made through joint assessments based on indicators.
- Draft List of beneficiaries by name by address must be verified through ground checks.
 Management must dare to name inappropriate names, including those included on the recommendation of the village government.

(After Mitigation Risk level : Low)

Marginalized and Vulnerable Groups.	
marginanzea ana vanierable Groups.	
The direct beneficiaries of this project are vulnerable and marginalized groups, Women/Female Headed Households, Persons with Disabilities, Adolescent Girls, Indigenous Peoples and households with extreme poverty levels. The participation of marginalized and vulnerable groups in strengthening climate resilience including sustainable livelihood activities and increasing access to natural resources will be prioritized. The project will identify marginalized and vulnerable groups in the project sites. Access and Participation of vulnerable and marginalized groups are often hampered by structural, social and cultural factors. The project must ensure to improved access and reduce barriers so that efforts to strengthen vulnerable and marginalized groups can be effective (Risk: Medium)	 An affirmative approach with regulation and quota determination will be applied. Followed by increasing the capacity of vulnerable and marginalized groups. On the other hand, increasing community understanding, especially key actors, of GEDSI will be carried out through GEDSI training and education in all villages. Project management must ensure and condition every aspect of project implementation to be friendly to vulnerable and marginalized groups. This must be done at the technical level and in as much detail as possible. So that it will involve appropriate calculations related to the selection of time, determination of place, arrangement of place, and provision of family-friendly activity atmosphere. As a safeguard, the Project prepares and implements a social-gender inclusion plan (SGIP). (After Mitigation Risk level: Low)
Human Right	
The project does not trigger human right issues (Risk: Negligible).	
Gender Equality & Women's Empowerment	
The results of the gender assessment suggest that women, their adaptive capacity and level of vulnerability to the adverse impacts of climate change are different. Women have lower adaptive capacity and higher levels of vulnerability. The assessment results also show that climate change has increased the level of gender injustice and worsened existing gender inequalities. Social and cultural conditions, as well as habits, and relationships within the household, are at risk of forming inequality in women's access and participation in the project. While the project is committed to increasing access and benefits that can be obtained by women, considering their greater capacity needs and challenges in overcoming the adverse impacts of climate change (Risk: Medium)	 Affirmative approach with regulation and quota setting will be applied. Followed by capacity building of vulnerable and marginalized groups. On the other hand, increasing community understanding, especially key actors towards GEDSI will be conducted through GEDSI training and education in all villages. Capacity building for women will be implemented methodically, including increasing male understanding of gender through male engagement. Women's leadership will be encouraged and developed through activity scenarios. For example, women-led mangrove rehabilitation. As a safeguard, the Project prepares and implements a social-gender inclusion plan (SGIP). (After Mitigation Risk level: Low)
Core Labor Right	
The project does not trigger core labor right issue. (Risk: Negligible).	
Indigenous People	

Initial assessment results found 5 Indigenous Communities, in 7 villages of the project location. Climate change has increased vulnerability due to decreased production and increased crop failure. This has reduced the ability of indigenous communities to provide food for their families and communities. So that food supplies must be supplied from outside through substitution from the marketing of commercial crops (gardens) and forest products. Crop failures also encourage land extensification and utilization of forest products, both wood and non-wood. This also creates a new tendency in the form of a shift in livelihoods from on-farm to off-farm.

Land extensification and utilization of forest products increase the potential for tenurial conflicts between indigenous communities and the government. (risk: Medium)

Indigenous communities are one of the focuses of this project. Which will be intervened through mentoring and organizing, mapping areas, and strengthening indigenous institutions.

Sustainable land use practices based on traditional agroforestry will be introduced or developed. Livelihood improvements will be carried out through economic development, and climate literacy will be carried out through climate schools.

To mediate conflicts, indigenous communities will be facilitated with social forestry schemes, so that the use of forest resources becomes legal, and a sustainable management system.

(After Mitigation Risk level: Low)

Involuntary Settlement

The project does not trigger any involuntary settlement. (Risk: Negligible)

Protection of Natural Habitats

Activities will focus on establishing new protected areas on land and water (MPA), restoring coral reef and mangrove ecosystems, and improving the quality of land cover other than agroforestry.

The project encourages the establishment of a sustainable community-based natural resource management system. Which is guaranteed by the availability of institutions and policies at the village and district levels. This mechanism delegates the role and responsibility of natural resource management to local governments and communities. Part of the management also includes the utilization of ecosystem goods and services such as clean water, ecotourism and sustainable aquaculture.

Conservation of Biological Diversity

This project will not result in a decrease in biodiversity, or have a negative impact on endangered, vulnerable, and protected species. Instead, this project has the potential to increase the scale of protection for habitat and biological diversity through the restoration of coral reef and mangrove ecosystems, which can support the protection or improvement of other ecosystems, such as seagrass beds.

Promotion of the utilization of forest and water resources may have an impact on certain ecosystems and species, such as non-timber forest products (NTFP) (Rattan, Bamboo, Mushrooms), or marine biota such as fish, crabs, octopus. However, the utilization of fast-growing NTFPs, in reality, has a less significant impact on ecosystem sustainability. Likewise, fishing by traditional fishermen. (**Risk:Low**)

- The project will develop a forest resource management plan in the social forestry work area in the form of RKPS (social forestry work plan) and RKT (annual work plan) which will be the basis for business groups to carry out controlled utilization efforts by considering potential. In addition, the project will also assist SF permit holders to organize PS area management through a zoning system, to ensure protection and rehabilitation in the SF area.
- The project will introduce the Code of Conduct Responsibility Fisheries, to SSF, including introducing protected fish species and treatment of bycatch.

(Risk: Low)

Climate Change	
The project does not triger Climate Changet. (Risk: Negligible)	
Pollution Prevention and Resource Efficiency	
The project does not triger this principles. (Risk: Negligible)	
Public Health	
Project activities do not trigger public health issue	
Physical and Cultural Heritage	
Project activities do not remove or trigger negative impact on cultural heritage. The project will strengthen customary law to protect natural resources. (Risk: Negligible).	
Lands and Soil Conservation	
Project activities do not have negative impact on land and soil conservation as project activities will not cause land/soil erosion. (Risk: Negligible).	

 Table 17. Analysis of Social and Environment Risk and Mitigation

F. Alignment with the Results Framework of the Adaptation Fund³

Project Goal	Project Goal Indicator	Funding Outcome	Outcome Indicator	Total Grant (USD)
Outcome 1.1.: Increase in village access through the establishment of ProKlim villages	100 Villages proposed and registered in the National Registration System (SRN). 15 Proklim Villages, assisted as ProKlim Model Pilots in the Sulawesi Neck area	Outcome 2: Strengthen institutional capacity to reduce risks that related with socioeconomic and environmental losses due to climate change	2.1. Staff capacity to respond to and mitigate the climate change impacts of target institutions is increasing	204,958
Outcome 1.2: Increase in knowledge about adaptation and climate information circulation	Percentage of cadre participants in field school able to practice climate change adaptation actions and conduct environmental monitoring	Outcome 3: Strengthen awareness and ownership of the process of climate risk reduction and adaptation at the local level	3.1. The percentage of the target population that is aware of the predicted adverse impacts of climate change and appropriate responses	38,802
Outcome 2.1. Better management of social forestry in the Neck of Sulawesi	Total area of social forestry area managed sustainably	Outcome 5: Increased resilience of ecosystems in response to climate change and stress caused by variability	5. Ecosystem services and natural resource assets are maintained or enhanced under stress caused by climate change and variability	72,509
Outcome 2.2: Sustainable of Marine Protected Area (MPA)	2 indicative MPAs, in Tomini Bay and Makassar Strait, have been proposed for determination through Regional Regulations	Outcome 5: Increased resilience of ecosystems in response to climate change and stress caused by variability	5. Ecosystem services and natural resource assets are maintained or enhanced under stress caused by climate change and variability	21,868
Outcome 2.3 : Environmental Functions in critical land zones restored	Critical land in the Social Forestry area and mangrove ecosystems are rehabilitated	Outcome 1: Reduce exposure to hazards and threats of climate change	Relevant threat and hazard information is produced and disseminated to stakeholders in a timely manner	175,807

³ The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

Outcome 3.1: Increase in micro/small businesses with innovative adaptation	Micro Businesses in 15 Villages have experienced business development	Outcome 6: Diversify and strengthen livelihoods and income sources for vulnerable communities in target areas	6.1. Percentage of households and communities that have more secure access to livelihood assets	215,166
Outcome 4.1: The availability of climate change adaptation policies at the district	The API Working Group was formed and determined by the Regent in 2 districts. The RAD API	Outcome 7: Improved policies and regulations that encourage and enforce resilience measures	7. Climate change priorities are integrated into national development strategies	104,346
level monitored by the Climate Change Working Group, officially supported by the district government	document has been compiled and proposed as a PERDA	Outcome 2: Strengthen institutional capacity to reduce risks that related with socioeconomic and environmental losses due to climate change	2.1. Staff capacity to respond to and mitigate the climate change impacts of target institutions is increasing	

Tabel 15. Alligment with the Results Framework of the Adaptation Fund

G. Project Budget

Program Number	Description	Budget Note	Detail Budget
Component I	Component I: Improving acces to resources for sustainable climate change adaptation at the village level		243,76
Outcome 1.1	Increase in village access through the establishment of ProKlim villages		204,958
Output 1.1.1.	Stakeholders' commitment to ProKlim villages	Objective: To create initial conditions that are conducive and enthusiastic for program implementation. The parties receive information on the start of the project, and get an overview of the overall project design, know the roles and cooperation needed, and the components that can be integrated. Involvement: Central Government (PPI Directorate, BPDAS, BPSKL, BPKH, PPI Center), Provincial Government (Governor, Environmental Service, Forestry Service, KPH) and Donggala and Parigi Moutong Regency Governments, Village Governments	85,492
Output 1.1.2.	Village Policies for Climate Change Adaptation and ProKlim Group Initiatives formulated.	Objective and Target: Adaptation policies at the village level are produced in the form of village regulations and the issuance of the Village Adaptation Plan. Concrete adaptation programs that are considered strategic and in accordance with the authority of the village government will be integrated into the Village Medium-Term Development Plan Document (RPJMDesa) so that the village as a community and regional unit will have a development agenda oriented towards climate change adaptation. This output will also produce community groups, as institutions in the village that will arrange the implementation of adaptation actions at the village level. Target: Village Government, BPD Involvement: Village Community Empowerment Service (PMD), Environmental Service, Legal Section of the Donggala and Parigi Moutong Regency Governments	46,351

Output 1.1.3	Proposed of 100 ProKlim villages in Donggala and Parigi Moutong	Objective and Target: Awareness and Action of adaptation becomes a movement adopted and implemented by many actors in 100 villages. To foster awareness and collective action followed by increased understanding of the challenges of climate change, as well as increased understanding of adaptation action options that can be developed according to the context of each village. 100 Villages will enter and correspond in the national registration system (SRN) which provides assessment of adaptation capacity, and recommendations for increasing adaptation actions to reduce vulnerability and increase adaptation capacity. Involvement: PPI Directorate, and PPI Central Suawesi Regional Office, University, Students, Village Youth and Village Government	73,116
Outcome 1.2	Increase knowledge and circulation of information on climate adaptation		38,802
Output 1.2.1	Increased knowledge of adaptation, as well as circulation of climate information	Objective and Target: Increased literacy of Village Communities on climate change, which will be a reference in understanding, interpreting and making decisions related to various climatological phenomena. Young people, the Millennial and Gen Z generations, both men and women, will introduce new tools and technologies, applications and software, including techniques and methods to assess the condition of ecosystems through field surveys and spatial data interpretation. \text{Involvement: BMKG, Central Sulawesi PPI Regional Office, University and You}	38,802
Component II:	Environmental improvement ecosystems through strengthening social forestry, rehabiliting critical areas and proposing the estabilisment of new protected areas		270,184
Outcome 2.1	Better management of social forestry in the neck of Sulawesi		72,509
Output 2.1.1.	Increases acces to social forestry and revitalization of Social Forestry acces holders	Objective and Target: community access and capacity in forest resource management increases. This means that 5 villages have legally obtained the right to manage forests. As well as increasing the capacity of forest management (social forestry) for 6 villages that have obtained legal access, in accordance with the Regulation of the Minister of Forestry and Environment No. 9 of 2021, and Number 48 of 2023. Increasing access Increasing access is beneficial for the community and the government, because 1). Resolving conflicts over forest control and management between the community and the government, while providing legal certainty for communities around the forest. 2). Improving the community's economy through the utilization of natural assets such as wood and non-wood (eg honey, rattan, coffee) and	27,041

		management of tourism services, water, and energy; 3). Increasing community participation and capacity for forest protection and rehabilitation. Granting/increasing access is carried out through Social Forestry permits by the government which consist of 3 schemes: Village Forests, Community Forests, and Community Plantation Forests. Involvement: Ministry of Forestry (BPSKL), Provincial Forestry Service, KPH (Forest Management Unit), Village Government, Village Forest Management Institution (LPHD) and Forest Farmer Group (KTH)	
Output 2.1.2.	Social Forestry Zoning Arrangement	Objective and Target: Management of Social Forestry Areas, 6 The government requires communities that are given Social Forestry Concessions to carry out management, consisting of Business Management, Institutions and Areas. This output is related to Area Management, which will be carried out through assessment of biophysical conditions and land cover, division of zones or blocks, spatial mapping and marking of boundaries within the social forestry area. The zones will be divided into 3 categories; 1. Utilization, 2. Rehabilitation and 3. Protection. Invovement: Ministry of Forestry (BPSKL), Provincial Forestry Service, KPH (Forest Management Unit), Village Government, Village Forest Management Institution (LPHD) and Forest Farmer Group (KTH)	45,468
Outcome 2.2	Sustainable of Marine Protected Area (MPA)		21,868
Output 2.2.1.	Identification and zoning of Marine Protected Areas (MPA) and/or Preserved Area around the Makassar Strait and Tomini Bay	Objective and Target: There are 2 areas in Tomini Bay and Makasar Strait that will become local conservation areas or Marine Protected Areas (MPA). This will be an important contribution, both ecologically and economically for fisheries. Because there will be a place that is closed to exploitation activities that allow certain types of fish to spawn and breed. This place will also provide protection for biodiversity. The determination of MPA will be carried out through social, economic and ecological studies, the results of this study will be an academic paper as a basis for the preparation of regional regulation drafts for the determination of MPA by the Regional Government.	10,358
		Involvement: Provincial and District Fisheries and Marine Services, Donggala and Parigi Moutong Regents, Donggala and Parigi Moutong DPRD, API Working Group and University	

Output 2.2.2.	Drafted local regulations regarding Marine Protected Areas (MPA) and/or Reserved Area around the Makassar Strait and Tomini Bay	Objective and Target: 2 Draft Regional Regulation or RANPERDA will be produced through academic and legislative processes. This process involves the design, consultation and approval of the Regional Government (PEMDA) and the DPRD to make the RANPERDA a candidate regulation. Approval will be followed by the willingness of the PEMDA or DPRD to use its right of initiative to propose PERDA. Based on Law No. 12 of 2011, only PEMDA and DPRD have the right to propose a Draft Regulation to be stipulated as a Regulation. In this Output, we hope not only to produce a RANPERDA, but to encourage one of the governments or DPRD to use its Right of Initiative to propose the RANPERDA, so that it can be discussed and stipulated as a New Regulation. Involvement: Regional Government, DPRD, Regional Government Legal Section, BAPEMPERDA, Legal Team	11,51
Outcome 2.3	Environmental Functions in critical land zones restored	DAI LIVII LINDA, Legai Team	175,807
Output2.3.1.	Rehabilitation of critical land in the FS working area with MPTS (Multi Purposes Tree Species)	Objective and Target: Degraded land in the Social Forestry area, covering an area of 110 Ha in 11 Villages is restored through rehabilitation activities with an Agroforestry approach. The plants that will be planted and maintained are the MPTS (Multi Purpose Tree Species) group consisting of forestry and plantation plants, so that they can produce economic and ecological benefits at the same time. Involvement: BPDAS, Forestry Service, KPH, LPHD, KUPS and KTH	101926
Output 2.3.2.	Increased land cover rehabilitation through mangrove involvement of women's groups	Objective and Target: Degraded land in coastal areas, especially in former mangrove areas that have been degraded due to logging, encroachment and former ponds covering an area of 130 Ha are restored to their function, through rehabilitation by women's groups. Plant development will be monitored continuously during the project period, and will be continued by women's groups when the project ends. involvement: BPDAS, Marine Fisheries Service, KOP, Village Government and Women's Groups	54,163
Output 2.3.3.	Rehabilitation of critical land in coral reef area	Objective and Target: 10 Ha of Coral Reefs in two areas are restored using the Bioreeftek Method. The use of this method allows the community to be actively involved, starting from preparation, construction, placement and replacement and monitoring. Involvement: Provincial Marine Fisheries Service, Donggala and Parigi Moutong Districts, Youth Groups, POKMAWAS.	19,718
Component	Social and economic resilience through livelihood improvement		215,166

Outcome 3.1	Increase micro/small businesses with adaptive innovation		215,166
Output 3.1.1	Development of small business eith adaptive capacity	Objective and Target: Knowledge and Business Skills for Vulnerable Groups; Women, People with Disabilities, Young Women, Indigenous People and Extremely Poor Households. Part of this objective, the target group is able to prepare business plans, investment plans and marketing. Involvement: Department of Cooperatives and Micro-Small Enterprises, Association of Small and Medium Enterprises, Private Sector	65,715
Output 3.1.2	Development of successional agroforestry as an alternative for sustainable land use	Objective and Target: This output will help the Indigeonus People community to improve their land management, to respond to the various adverse impacts of climate change, on the land sector and agricultural businesses. This approach will provide an adaptation alternative that allows Indigeonus People to intensify land and encourage changes in extensive land use patterns. The agroforestry pattern will reduce and improve the vegetation structure both in terms of species diversity and stratification, thereby increasing protection from erosion. Involvement: Agriculture and Plantation Service of Donggala and Parigi Moutong Regency, Forestry Service, Social Service and Forest Management Unit	54,423
Output 3.1.3	Small-scale fishermen able to utilize adaptive knowledge and technology in fishing and aquaculture	Objective and Target: This output is to help improve and enhance economic efforts carried out by community groups that live from small-scale fisheries (SSF) for women and men, in shallow waters, coral reefs and tidal areas. by developing new approaches, techniques or equipment, and aquaculture. This output targets: Fisher women and Poor Fishermen Households Involvement: Department of Marine and Fisheries of Donggala Province, Regency and Parigi Moutong	95,029
Component IV	Provision of instruments and local policies to strengthen adaptation actions and ensure program sustainability of the program		104,346

Outcome 4.1.	The availability of climate change adaptation policies at the district level monitored by the Climate Change Working Group, officially supported by the district government		104,346
Output 4.1.1	Estabilisment of climate change working group in donggala and parigi moutong district	Objective and Target: The Climate Change Adaptation Working Group or POKJA API will be formed and ratified by the Donggala and Parigi Moutong Regency governments through a Regent's Decree (SK). POKJA API must be a multistakeholder institution, consisting of various interest groups in the district. POKJA API will play a role in planning and encouraging adaptation initiatives including concrete adaptation actions carried out by the government, non-governmental organizations, and the community. Involvement: Regent of Donggala and Parigi Moutong, Related Agencies, academics, NGOs, Private Sector, Professional Associations.	12,232
Output 4.1.2	Availability of the Climate Change Action Plan (RAD PI) for Donggala and Parigi Moutong Districts	Objective and Target: The formation of new policies in 2 districts, in the form of draft Regional Regulations on Regional Action Plans for Climate Change Adaptation (RAD API), this instrument will mainstream attention and actions to increase climate resilience. as well as being the basis for the government to plan and budget adaptation programs and activities in the APBD (Regional Government Revenue Budget). this will increase the role and responsibility of local governments to increase adaptation capacity and reduce the negative impacts of climate change. Involvement: Donggala and Parigi District Government, Universities, Private sectors, NGOs, Mass Media	68,167

Output 4.1.3.	Promotion and dissemination of climate change response initiatives.	Objective and Target: This output targets the general public, observers, practitioners and policy makers through outreach efforts with publication and communication in the form of media coverage, social content production through various platforms, website publication, production and screening of short films through YouTube channels and screening of films in public places, installation of advertisements, writing books and publishing journals. Mass Media, Creative Group (content creators, influencers, production houses), University	23,947
	Total Project/Programme Activities Cost		833,456
	Project Execution Cost		87,49
	Project/Programme Cycle Management Fee charged by the Implementing Entity		78,28
	Total		999,226

H. Disbursment Schedule

	Upon signature of the Agreement	One Year after Project Start ^{a)}	Total
Scheduled date	1 April 2025	31 March 2027	
Project Funds	480.039	440.907	920.946
Implementing Entity Fee	40.803	37.477	78,280
Total	520.842	478.384	999,226

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

A. Record of endorsement **on** behalf of the government²

Ir. Laksmi Dhewanthi, M.A. IPU Director General of Climate Change Ministry of Environment and Forestry, Indonesia	Date: August, 5, 2022
H.Rusdy Mastura The Governor of Central Sulawesi Province	Date: July, 11, 2022
DR. Drs Kasman Lassa, SH.,MH Regent of Donggal District	Date: July, 5, 2022
Samsurizal Tombolotutu Regent of Parigi Moutong District	Date: July, 07, 2022



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

Manggala Wanabakti Building Block VII 12th Floor, Jalan Gatot Subroto — Senayan, Jakarta 10270 Phone +62 21 5730144 Fax.: +62 21 5720194

5. 282 / PPI / API / PPI-0/8/2002

Jakarta. € August 2022

Our Ref. Attachments Subject

: Letter of endorsement

The Adaptation Fund Board c/o Global Environment Facility Mail stop: N 7-700 1818 H Street NW Washington DC 20433, USA

Directorate General of Climate Change Ministry of Environment and Forestry as the National Designated Authority of Adaptation Fund in Indonesia through Kemitraan - Partnership for Governance Reform as the National Implementing Entity, have received and appraised 37 incoming concept notes.

After a thorough assessment process of the incoming concept notes, we come to the decision that the following 10 (ten) concept notes from 10 (ten) different organizations have met and are in accordance with the national priorities in the implementation of adaptation programs and activities to increase adaptive capacity and to reduce the impact and risks of climate change in

- vulnerable regions in Indonesia:

 1. Yapeka; Ecosystem-based Adaptation to Support Climate Resilience in Coastal and Small Islands of Rote Ndao and Sabu Raijua Districts in the Savu Sea
- TLKM; Sustainable Landscape Governance; Towards Climate Resilience of Community in Tempe Lake Ecosystem
- KAPASITAS; Adaptation to climate change through integrated forest management and sericulture business to achieve ecosystem resilience to food security for the Lake Tempe Catchment Area Community
- Caris Biru; Strengthening the Adaptive Capacity of Coastal Village Communities in Supporting Food Security as a Response to Climate Change Through Stakeholder Elaboration Actions in West Sulawesi Province
- Sajogyo Institute; Collaboration for the Conservation of Cimandiri WatershedLandscapes through the Potential of Silvopasture and Community Agroforestry KOAKSI; Building Climate Resilient District in Indonesia: Case of Sigi District
- KEMITRAAN; Village Based Coastal Adaptation and Resillience in Lombok Province of West Nusa Tenggara
 HUMA; Change Climate and Adaptation in the Buffer Area of the New National Capital

- Hown, Change climate and Audition in the Bother New Office we windown Capital
 Mitra Asks; Increasing the resilience of smallholders from climate impacts through Smart
 Agriculture based on Livelihood Diversification in Indonesia
 KUAT (KARSA); Strengthening Community Adaptation toward Climate Change trough
 ProKlim in Ecoregion Neck of Sulawesi Island



With this consideration, and in my capacity as the National Designated Authority of Adaptation Fund in Indonesia, I recommend the above proposals be granted support from the Adaptation Fund Board. All those programs will be executed by each of the submitting entities under the supervision of Kemitraan - Partnership for Governance Reform.

Laksmi Dhewanthi Director General of Climate Change Ministry of Environment and Forestry as Indonesia Designated Authority of Adaptation Fund

Copy to: Kemitraan (Partnership Governance Reform in Indonesia)





A. Implementing Entity certification

⁴I 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: Eka Melisa

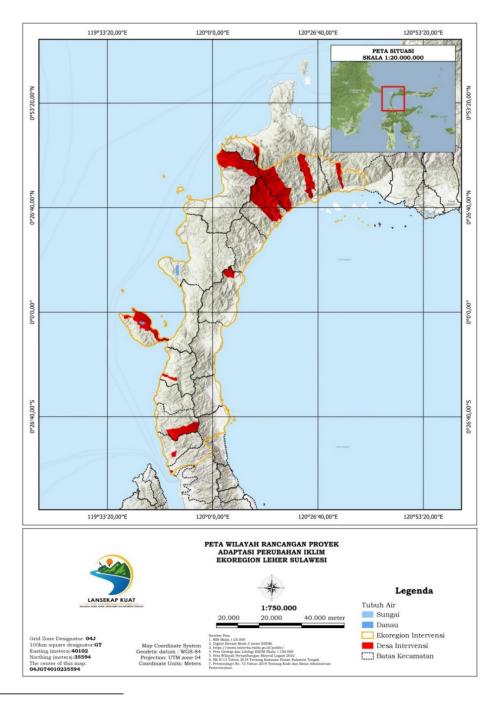
Tel. And Email: ; +62-818-764-746 ; eka.melisa@kemitraan.or.id

^{6.} Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

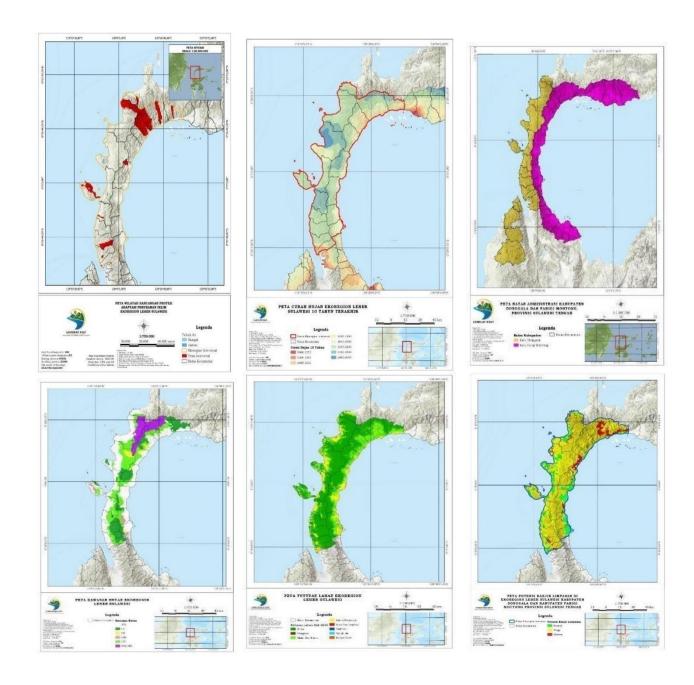
⁴ Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

Annex

Annex 1 : The Map of Intervention The Neck of Sulawesi Ecoregion⁵

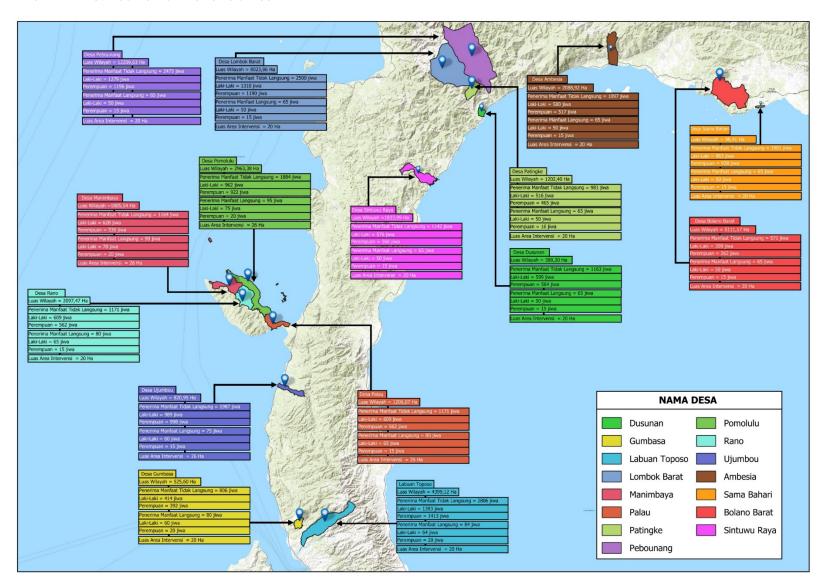


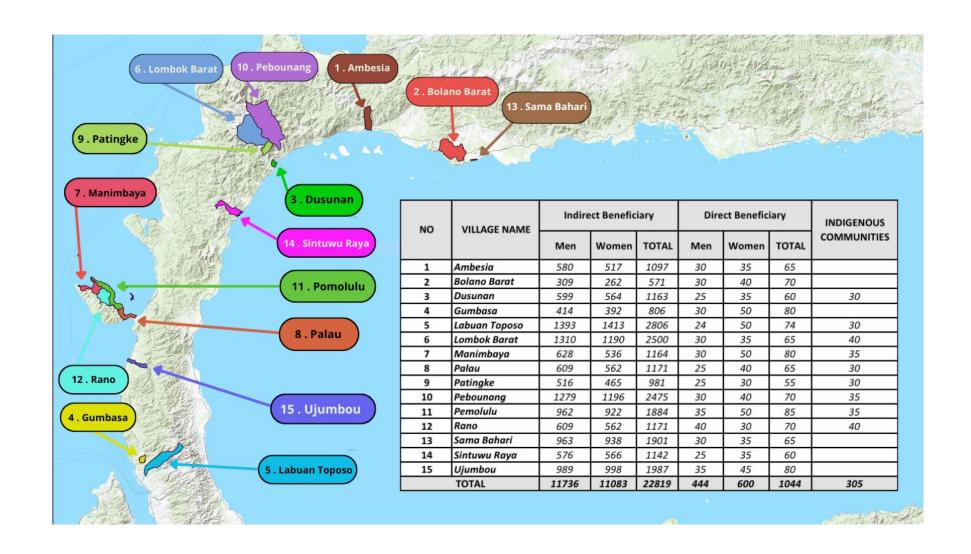
⁵ Didasarkan Pada Peta Wilayah Ekoregion Indonesia, 2018. Lampiran Keputusan Menteri LHK, SK.8/menlhk/setjen/PLA.3/1/2018. Ekoregion Leher Sulawesi, merupakan pengelompokan Sebagian atau keseluruhan Ekoregion Dataran Fluvial Wera – Tavaili, Dataran Fluvial Donggala-Poso, Tanjung Santigi – Tanjung Randangan. Ekoregion tersebut merupakan satu bentang alam yang terhubung secara geografis. Secara umum masyarakat di Sulawesi Tengah menyebut Kawasan itu sebagai Leher Sulawesi



Annex 2 .Table of Beneficiaries

Annex 2.1. Distribution of Beneficiaries





2.2 Table total population

Distrik	Sub -	Villages	Intervention	Indirec Beneficia			Direct B	eneficiary		Ket
	district	19		Men	Women	Total	Men	Women	Total	
Donggala	Balaesang Tanjung	Palau	Usulan ProKlim, Mangrove Restoration, Coral	609	562	1171	25	40	65	Kel Tani Mangrove, Kel Nelayan Tangkap, Kel Tani Cengkeh, Kel PS,
		Pomolulu	Transplatation, ProKlim Proposed, Aquaculture, Climate Field School, Economic Development and Village engagement	962	922	1884	35	45	89	Women Gropu
		Rano	Penguatan PS, Lake Protection, Proklim Proposed, Maping and Strengtening Indigeounus Institutional, Econimic develpoment	790	808	1598	40	30	70	Kel.PHD (KUPS Pala dan Kopi), Nelayan Danau (sustainable fhiseris on lake system, women group
		Manimbaya	PS and Proklim Proposed, Maping and Strengtening Indigeounus Institution, MAP, sustainable fhisering, coral transplation, Mangrove restoration, Indigeounus Institutional, Village Governance	628	536	1164	40	50	90	Kel Tani Mangrove, kel Nelayan Tangkap, Kel Tani Cengkeh, Kel PS, Kel Usaha Perempuan, K VCO (coconut), KTH and KUPS Rattan
	Labuan	Labuan	Penguatan PS, HKm Rattan, Proklim, Water	1393	1413	2806	25	50	75	KTH, KUPS Rattan, Kel Ekoswisata. Kel Tani Bawang Merah, Kel

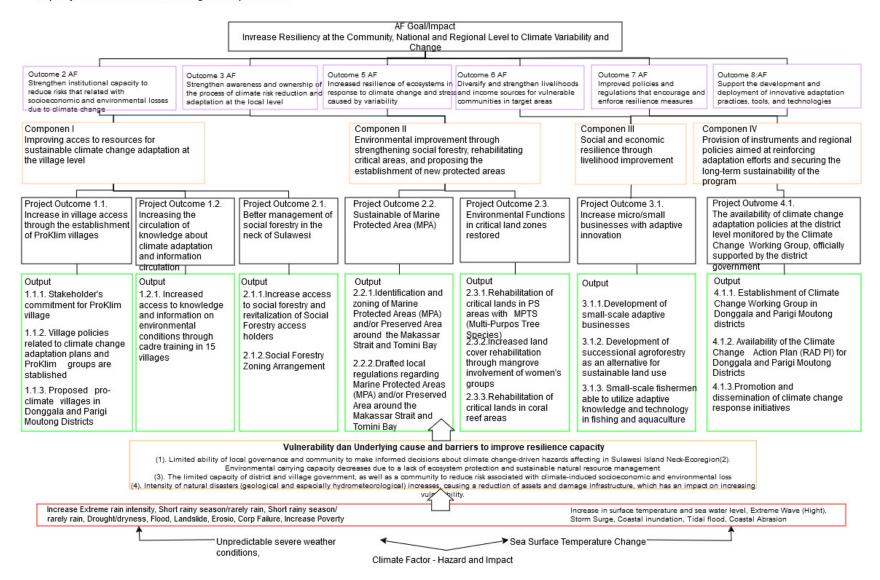
	Sindue	Kumbasa	Sheed Rehabilitation, Climate Field School, Economic Development ProKlim Proposed,	414	392	806	30	50	80	Duiran. K. Tani Jagung, K. Tani
			Aquaculture, Climate Field School, Economic Development and Village engagement, land and Forest Restoration							Kacang Tanah, K Sayur Sayuran, K Kopra, K Apukat
	Sirenja	Ujumbou	Penguatan PS, HKm Rattan, Proklim, Proposed, Water Sheed Rehabilitation, Agroforestry, Climate Field School, Economic Development	989	998	1987	35	45	80	K. Tani Jagung, K. Tani Kacang Tanah, K Sayur Sayuran, K Kopra, K Apukat
Parigi Moutong	Palasa	Pebounang	PS and Proklim Proposed, Maping and Strengtening Indigeounus Institution, MAP, sustainable fhisering, coral transplation, Mangrove restoration, Indigeounus Institutional, Village Governance	1279	1196	2475	30	40	70	K Tani, Lembaga Adat, Kel Perempuan, K Usaha Perempuan, Pemerintah Desa
	Tomini	Ambesia	Usulan ProKlim, Mangrove Restoration, Coral Transplatation,	580	517	1097	30	35	65	Kel Tani Mangrove, kel Nelayan Tangkap, Kel Tani Cengkeh, Kel PS, Kel Usaha Perempuan,

		ProKlim Proposed, Aquaculture, Climate Field School, Economic Development and Village engagement							K VCO (coconut), KTH and KUPS Rattan
Bola	ano Bolano Barat	ProKlim Proposed, Aquaculture, Climate Field School, Economic Development and Village engagement, land and Forest Restoration	309	262	571	30	38	58	Kel Tani Mangrove, kel Nelayan Tangkap, Kel Nelayan Perempuan, Kel Usaha Perempuan, K VCO (coconut), KTH and KUPS Rattan
	Sama Bahari	ProKlim Proposed, Aquaculture, Climate Field School, Economic Development and Village engagement, land and Forest Restoration	963	938	1901	30	35	65	Kel Tani Mangrove, kel Nelayan Tangkap, Kel Tani Cengkeh, Kel PS, Kel Usaha Perempuan, K VCO (coconut), KTH and KUPS Rattan
Sido	oan Sintuwu Raya	ProKlim Proposed, Aquaculture, Climate Field School, Economic Development and Village engagement, land and Forest Restoration	576	566	1142	25	35	60	Kel Tani Cengkeh, Kel PS, Kel Ternak, Kel Usaha Perempuan, K VCO (coconut), KTH and KUPS Rattan
Tino	ombo Lombol barat	PS and Proklim Proposed, Maping and Strengtening Indigeounus Institution, Indigeounus Institutional,	1310	1190	2.500	30	35	65	Kel Tani Mangrove, kel Nelayan Tangkap, Kel Tani Cengkeh, Kel PS, Kel Usaha Perempuan, K VCO (coconut), KTH and KUPS Rattan, Pokmawas

			Village Governance, economic development, agroforestry							
		Dusunan	Usulan ProKlim, Mangrove Restoration, Coral Transplatation, ProKlim Proposed, Aquaculture, MPA, Climate Field School, Economic Development and Village engagement	599	564	1163	25	35	60	Kel Tani Mangrove, kel Nelayan Tangkap, Kel Tani Cengkeh, Kel PS, Kel Usaha Perempuan, K VCO (coconut), KTH and KUPS Rattan, Pokmawas
		Patingke	Usulan ProKlim, Mangrove Restoration, Coral Transplatation, ProKlim Proposed, Aquaculture, MPA, Climate Field School, Economic Development and Village engagement	516	465	981	25	27	52	Kel Tani Mangrove, kel Nelayan Tangkap, Kel Tani Cengkeh, Kel PS, Kel Usaha Perempuan, K VCO (coconut), KTH and KUPS Rattan, Pokmawas
TOTAL	5	15		11.919	11.230	23.149	799	245	1.044	

Annex 3. Teory of Change

Theory of Change. Consortium KUAT: the Project of Increase Adaptation Capacity in Sulawesi Island Next Ecoregion - Adaptation Fund



Terminology

Coastal Abrasion is a natural process in the form of soil erosion in coastal areas caused by destructive waves and ocean currents

Coastal Inundation is the covering of normally dry land with water. This refers to the long term result of sea-level rise, as well as the shorter and more variable impacts of high-tide and storm surge flooding.

Drought/dryness is a prolonged dry period in the natural climate cycle that can occur anywhere in the world. It is a slow-onset disaster characterized by the lack of precipitation, resulting in a water shortage. Drought can have a serious impact on health, agriculture, economies, energy and the environment.

Erosion is the action of surface processes (such as water flow or wind) that removes soil, rock, or dissolved material from one location on the Earth's crust and then transports it to another location where it is deposited.

Floods are the most frequent type of natural disaster and occur when an overflow of water submerges land that is usually dry. Floods are often caused by heavy rainfall, rapid snowmelt or a storm surge from a tropical cyclone or tsunami in coastal areas.

Landslides are geological event, that occur when large masses of soil, rocks or debris move down a slope due to a natural phenomenon or human activity. Mudslides or debris flowsare also a common type of fast-moving landslide.

Storm is an extreme weather condition with very strong wind, heavy rain, and often thunder and lightning

Tidal Floods: are patterns of sea level fluctuation that are influenced by the gravitational pull of celestial bodies, especially the moon and sun, on the mass of seawater on earth. Tidal floods occur as a result of sea level rise caused by sea tides. In addition, tidal flooding is also caused by external energy factors such as water, wind, or swell (waves that travel very far away from the generating area); storm at sea; as well as polar ice melting triggered by global warming..

Annex 4. SOCIAL-GENDER INCLUSION PLAN (SGIP)

Strengthening Community Adaptation Capacity Against Climate Change in the Sulawesi Neck Ecoregion

KONSORSIUM KUAT

(Karsa Institute, Komiu Foundation, Awam Green Foundation, Tadulako University

Key Issues	Action	Target/Indicator	Budget	Timeline
In capture fisheries culture and business, women's position is considered below and less	- Conduct gender analysis in the capture fisheries business (demersal and pelagic)	Documents resulting from studies that can provide an understanding of gender	- Included in output 1.1.1. activities 3 and 4	Q 1
important than men's (subordinate). Women are placed on the edge of the beach because they are considered unable to withstand the risk of going to sea, so women are placed in positions that are not dangerous. Along the beach, fishing women can collect shellfish, crabs, shrimp, and squid.	 Develop an operational plan for gender mainstreaming Identify and recruit female cadres Develop a plan to increase the Capacity of women cadres to conduct a room for discussion on gender to understand the gender dynamics among the local 	relations in the fishing community Policies and operational measures to promote gender equality Orienting toward good adaptation based on local gender dynamics	- Included in output 2.3.2. activities 1,2,3 and 4	Q5-Q7
Climate change causes extreme weather events and climate variability in the Tomini Bay and Makassar Straits. Weather onditions are now increasingly erratic, with the intensity of bad weather events becoming more frequent, and fishing time is getting shorter. In this situation the production burden will be transferred to landnamely to	- Introduction of sustainable coastal aquaculture technology Develop aquaculture business Supporting fishery product processing business to increase added value;	- There are new aquaculture technology/techniq use that can be practiced by women's groups. The development of sustainable aquaculture business, which is integrated with coastal conservation Diversification of fishery products There is or increased production of processed fishery products	- Include in output 3.1.3, activity 4 and 5 - Include in output 3.1.1., activity 1,2 & 3.	Q2-Q3 Q2-Q3 Q5-Q7
businesses or places of business that are the domain of women fishermen, namely, the coast. Women, especially heads of household, are the main beneficiaries of damage to coastal ecosystems (mangroves and coral	Restoration of Mangrove and Coral Reef ecosystems as a support for livelihood systems, as well as part of the production chain for small	- Rehabilitation and restoration of 130 hectares of mangrove ecosystem in 13 villages	- Include in output 2.3.2., activity 3 and 4 Include in output 2.3.3., activity 3 dan 4	Q 5 – Q 7
reefs), because this area is the	fishermen, women and female heads	- Rehabilitation of damaged	- Include in output	Q6-Q8

domain of women.	of household	coral reefs 10 Ha Determination of coastal protection areas in the form of Marine Protected Area (MPA) or Preserved Area	2.2.1. activity 3,4,5,6	
The absence of local policies and studies on climate change in determining strategic steps as an effort to protect the impacts of climate change for vulnerable groups, women and the poor.	Facilitating the strengthening of climate change adaptation capabilities, including vulnerable groups and women, through the establishment of the ProKlim Village and expanding access to forest resource management through social forestry Encouraging the birth of Village Regulations on Participation and Sustainable Land Use Planning (PaSLUP) which are participatory and based on Traditional Wisdom	 Document of disaster risk assessment and village vulnerability to climate change takes into account the impact on vulnerable groups, women, fishermen, farm workers, and farmers belonging to the poor The existence of a Village Regulation on sustainable land use planning assessment and village vulnerability to climate change takes into account the impact on vulnerable groups, women, fishermen, farm workers and farmers belonging to the poor The existence of a Village Regulation on sustainable land use planning 	 Include in output 1.1.3 activity 2. Include in output 1.1.2. activity 2,3,4,5 & 6 1.1.3 activity 2. Include in output 1.1.2. activity 2,3,4,5 dan 6 	Q1-Q2 Q1-Q2
The low participation of vulnerable groups and women in obtaining information on climate change, as well as the development of policies and adaptation actions due to limited access, capacity and knowledge	- Provide a Gender Inclusion Plan (SGIP) policy - Provisions for the mandatory involvement of at least 30% of women in various organizational/gr oup management structures, in meetings, training, delegation, etc Encouraging the birth of women's leadership Establishment of a gender-based Climate School in each program target area	There is a comprehensive planning related to gender and social inclusion that becomes the guideline for gender mainstreaming in the program Women's participation increases, and has an impact on increasing women's capacity Women's access and control in decision making The emergence of a number	Generally integrated into all activities, Technically it will relate to output 1.1.1. activities, 3. Mapping of beneficiaries, as well as GEDSI Training for all Program Implementers, and Output 2.3.2. Women Lead on Mangrove Rehabilitation	Q 1 and Throughout the Project Period

		of cadres of female leaders who are pioneers of adaptation actions		
The high risk of disasters at sea faced by women and small fishermen due to climate change due to the unavailability of information and technology support to the community at the village level	Construction of an easy and simple flow of information and technology presentation to expand access for women and small fishermen as a step to reduce the risk of marine disasters	Development of information systems and marine disaster risk reduction technology through Maritime Information System Display Support – BMKG i	Include in output 1.1.4. activity 1,2,3 dan 4	Q 2

Annex 5

Gender Assessment

Perspective on Gender Empowerment and Social Inclusion in project planning in the Wera – Tavaili ecoregion, Donggala – Poso ecoregion & Tanjung Santigi-Tanjung Randangan ecoregion on the Neck of Sulawesi Island.

This section contains preliminary findings regarding the gender and social context assessment which will highlight the need to consider the social and gender context in project implementation to ensure that access, participation and control over project resources will include women and men from different social classes in the community. in the project

a. Gender and Social Structure

The Kaili, Lauje, and Balaesang tribes are indigenous groups inhabiting the neck of Sulawesi Island, with customary laws or practices in their daily activities, particularly in managing natural resources in their territories. These communities have traditions of mutual cooperation and collective work. These traditions are expressed in various sub-tribal languages: Mosiala Mplae, Sintuwu, all meaning a barter system of labor in managing agricultural land and other economic resources. Additionally, they classify land based on land cover conditions, topography, and position from the settlement center, categorized as:

- 1. Pangale: Areas that cannot be managed due to their high and steep terrain. These areas have high biodiversity and must be protected. The community believes these areas are inhabited by ancestral spirits, a tradition highly respected by the Lauje people.
- 2. Povia'a: Areas typically managed by the community for fields, especially for rice, sweet potatoes, and corn, using shifting cultivation systems.
- 3. Pinojo'ong/jo'ong: Areas for growing agricultural commodities. Distinguished from Jurame/Ulate, Pinojo'ong/Jo'ong are predominantly planted with secondary crops like cloves, coconuts, and cocoa.
- 4. Pampa: Reserve plantation land planted with shade trees, bananas, cassava, and medicinal plants. The Kaili people in the mountains typically have reserve gardens near rivers, used during droughts.
- 5. Kinta: Settlements where clusters of houses are built by the community

Local wisdom in land utilization is a social asset that can be revitalized and implemented into participatory and sustainable natural resource management, which is crucial for this project.

The social structure of the Kaili, Lauje, and Balaesang communities is similar, with four social classes: Madika/maradika (royalty/nobility descendants), Totua nungata (descendants of community leaders), To Dea (common people), and Batua (servants/slaves). However, the Batua class has gradually disappeared over time.

This social structure was influenced by Dutch colonial conquests, creating social classes integrated into the government structure, affecting land ownership patterns

The Kaili community doesn't entirely adhere to a patriarchal system. Responsibilities between men and women, from domestic to public spheres, are decided with input from women. For instance, in determining planting seasons, decisions in the Kaili community residing in Labuan Toposo Village, Donggala Regency (one of the villages on the neck of Sulawesi Island), are made by tina nu ngata or female elders. Tina nu ngata provide considerations and make decisions based on celestial observations, as in traditional ceremonies.

However, in domestic realms, women's primary responsibilities include meeting family and household needs, including caregiving, food, water, fuel (wood), and clothing production (traditional weaving), while men manage land and plantations from land preparation to harvesting. In each role, the opposite gender can contribute but typically only as supporters and might not be interchangeable

The weak capacity in resource management has led to the economic conditions of the Totua Nungata and To Dea social classes not improving. Additionally, the phenomenon of early marriage in villages around forests has triggered high cases of violence and even divorce. Data from Religious Courts (PA) in Donggala Regency from 2020-2024 recorded approximately 4,310 divorce cases, while Parigi Moutong Regency recorded 5,772 divorce cases in the same period. With vulnerable age groups of 20-50 years old, divorces are primarily due to economic issues. This is exacerbated by the impacts of climate change, which have further reduced income from agriculture and fisheries sectors.

The findings from interviews and public consultations in 24 villages in November 2023 revealed gender roles traditionally defined in relation to control and access to resources, including:

1. Household assets and resources:

In this aspect, seven variables were assessed, including food, ownership/inheritance, livestock, seeds, household income, market (buy/sell), and decision-making.

Most respondents in the 24 villages stated that preparing food in the household and going to the market are women's tasks. Meanwhile, regarding ownership of property, livestock, houses, and decision-making, it is the responsibility of men. This shows that men's roles still dominate in controlling and accessing resources in the domestic realm.

2. Community assets and resources:

In this aspect, six variables were assessed, including water (domestic & irrigation), forests and natural resources, communal land (grazing and farming areas), savings and credit, seedlings, and seed assistance.

In the domestic realm, women are responsible for ensuring the availability of water for daily needs. Additionally, in public domains, not only men but also women can access savings and credit. In villages near forests, women have access to forest resources, including seedlings and seed assistance. Women typically gather forest products such as pandanus, medicinal plants, ferns, and bark. Moreover, women are also involved in managing agricultural land in these areas. However, in coastal villages, all access to resources, savings and credit, and land management are dominated by men.

3. Public service access:

In this aspect, there are 5 variables evaluated, including legal aid services, training/socialization/education, agricultural and fisheries equipment technology, social security (BPJS, BLT, social assistance, and non-cash food assistance), and internet access.

All respondents in the 24 villages stated that women can only access social security in the form of direct cash assistance (BLT), social assistance (Bansos), and non-cash food assistance (BPNT). Meanwhile, some women in these villages cannot access health insurance (BPJS).

On the other hand, in remote villages near forests, some men cannot access legal aid, training, agricultural and fisheries equipment technology, and internet access, while men in coastal areas can access almost all of these aspects.

4. Participation in disaster management:

In this aspect, there are 2 variables evaluated, including first, adaptive and climate services (agricultural conservation, landslide mitigation, reforestation, rehabilitation of degraded land, water conservation), and second, disaster management services (prevention, mitigation, preparedness, response, and recovery).

All respondents in the 24 villages stated that women cannot access adaptive and climate services or disaster management services. Meanwhile, men in mountainous and coastal villages can access both services. This undoubtedly makes women highly vulnerable to the impacts of climate change.

Proposal implications in project planning:

The main goal of this program is to enhance the effectiveness and capacity of rural communities to adapt to the impacts of climate change in the Wera – Tavaili ecoregion, Donggala – Poso ecoregion, and Tanjung Santigi-Tanjung Randangan ecoregion on the Neck of Sulawesi Island, Central Sulawesi Province.

Gender assessment table of program components

Project componen	Gender and social exclusion risks	Gender and social inclusion, proposed activities to mitigate risks
Component I: Strengthening the capacity of village-based community adaptation, through the realization of the ProKlim village	Planning the establishment of ProKlim groups, drafting climate change action plans, and participating in climate schools, involving todea and totua nungata, while for the madika/maradika class who work in bureaucracy, they are responsible for implementing the action plans.	Conducting a gender and social assessment to identify key stakeholders outside the elite group; including understanding gender-based living spaces, current livelihood models, and current practices of resource protection and management. 1. Gender and social analysis to identify marginalized groups at risk. 2. Involving women and vulnerable groups in planning and decision-making. 3. Organizing training and capacity building to strengthen the participation of women and vulnerable groups. 4. Encouraging participation in inclusive and diverse discussion forums and decision-making processes.
Component II Ecosystem improvement through strengthening social forestry, rehabilitating critical areas, and establishing new protected areas.	Women and men in the social classes of Totua Nungata and Todea lack knowledge and capacity related to social forestry, information on critical land, and the establishment of protected areas. The ecosystem restoration model is not suitable for the local context.	Identify and analyze gender and social aspects to understand the needs and challenges faced by women and vulnerable groups. Ensure active participation of women and vulnerable groups in the planning and implementation of ecosystem restoration activities. Conduct specialized training and mentoring to enhance the knowledge and involvement of women and vulnerable groups.

	Disparities in knowledge and access related to social forestry and ecosystem rehabilitation. Proposed Activities to Reduce Risks:	Promote the exchange of knowledge and best practices among all relevant stakeholders Implementing learning and ecosystem restoration activities based on local wisdom, prioritizing the representation of women and men from the social classes of Totua Nungata and Todea if feasible in separate gender-based groups. Conducting gender sensitivity training for women's climate resilience groups. Targeting women from various social strata to be part of women's climate resilience groups.
Component III Enhancing social and economic resilience through improving the livelihoods of the poor, women, and vulnerable groups.	The Todea and Totua Nungata groups, both women and men, are social groups that lack access to improved livelihoods. This social class is often the poorest and most affected by the decline in environmental quality and climate change.	Providing access for women and men from the Todea and Totua Nungata social classes to enhance their skills in improving social and economic resilience.
Component IV: Provision of Policies and Regional Instruments to Strengthen Adaptation Actions and Ensure Program Sustainability**	Policymakers must possess a gender and inclusion perspective, as this can influence adaptive climate actions in the protection and management of the ecoregions of neck Sulawesi.	Ensure that inputs from Components 1, 2, and 3 related to gender and social inclusion are considered in the policy advocacy process.

ANNEX 6.

					Ta	ahu	n 1	1 (Maret 2025) Tahun 2 (Maret 2								202	5)								
С	Description of Item	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Outcome 1.1	Increase in village access through the establishment of proklim villages																								
Output 1.1.1.	Stakeholders' commitment to Proklim villages																								
Activity	Launching of the program at the provincial level by the Governor in Palu	х																							
	Program socialization at village level		х																						
	Mapping of program beneficiaries and building a complaint mechanism		х	х	х																				
	4. GEDSI Training for all Program Implementers		х	х																					
Output 1.1.2.	Villages Policies for Climate Change Adaption and Proklim Group Initiatives formulated																								
Activity	Discussion Problem identification and Preparation Documentation				х																				
	Training on making village regulations													х											
	Preparation of Ranperdes on Proklim													х	х										
	Public consultation on Ranperdes															х									
	5. Invitation of Ranperdes on pro-climate																х								
	6. Facilitating the establishment of pro-climate					х																			

					T	ahu	n 1		ret	202	5)						Ta	ahu	ın 2	(N	lare	20	25)		
De	scription of Item	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	' 8	9	10	11	12
	working groups.																								
	7. Deliberation on election of pro-climate group management					х	х																		
	8. FGD on the preparation of the pro-climate group work plan.							x																	
	Facilitating the inauguration of pro-climate group management by the village head							х																	
	10. Community Organizing / Mentoring and Assistance in organizing village communities	х	x	х	х	х	х	х																	
Output 1.1.3	Proposed of 100 ProKlim Villages in Donggala and ParigiMoutong																								
Activity	Training and Preparation of Proklim Enumetars from BLH Donggala and Parimo Districts							x																	
	2. Collection adn Input of Proklim Village Proposals in the National Registration System							x	x	х															
	Communication and coordination with BPPI Sulawesi.and DLH								х																
	Assistance in preparing and pro-climate village proposals									х	х														
	5. Propose 100 ProKlim Villages through the national registration system for climate change control									x	x	x	x												
	6. Correspondence and proposal escort											х	х												

					Ta	ahu	n 1	Ma	ret	202	25)						Ta	ahu	n 2	(Ma	ret	202	5)		
D	escription of Item	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Outcome 1.2	Increase access and availability of knowledge and information on climate change																								
Output 1.2.1	Increased knowledge of adaptation, as well as circulation of climate information																								
	Development of Climate Schools in 15 villages												х		х		х		х		х		х		
	Intensive course on aerial and underwater drone operation for Millennials, documentation of potential villages activities													x	x										
	Millennials conduct periodic forest and coastal health monitoring														х		х		х		x		х		х
	4. Updates Periodic reports on cover changes and infographic displays on forest and coral reef health in 15 villages												x						x						X
ecosystems to forestry, reha	: Environmental improvement hrough strengthening social biliting critical areas and e estabilisment of new																								
Outcome 2.1	Better management of social forestry in the neck of Sulawesi																								
Output 2.1.1.	Increases acces to social forestry and revitalization of Social Forestry acces holders																								
Activity	Workshop on Social Forestry Revitalization in 6 permit holders and 2 prospective permit holders			х	х																				

					T	ahu	n 1	(Ma	ret	202	5)						Ta	ahu	n 2	(M	aret	202	25)		
	Description of Item	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
	Facilitating the acceleration of issuance of permits for 2 new social forestry areas					x	х	x																	
	3. Facilitate the preparation of the RKPS (Social Forestry Work Plan) and RKT PS (Annual Work Plan on Social Forestry) documents with climate change adaptation orientation for 8 permit holders							x	x	x															
	Arrangement of Social Forestry block area in 6 existing social forestry							x	x	x															
	5. Community Organizing / Mentoring and Assistance in organizing village communities	x	x	х	x	x	x	х	х	x	x	x	x												
Output 2.1.2.	Zoning of social forestry area																								
Activity	Participatory field tracking of new protection zones within the Social Forestry area and Outside the Social Forestry area							x	x	x															
	Workshop on integration of utilization blocks, land use plans with detailed village spatial plans									x	x														
	New protection zone delineation											х	х												
	 Workshop on establishing and affirming new protected zones. 													x											
	5. Arrangement of block boundaries/protection zones in social forestry areas and local protected areas													х	х										

					Ta	ahu	n 1	(Ma	ret	202	:5)						Ta	ahu	n 2	(Ma	ret	202	5)		
ı	Description of Item	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
	6. Procurement of assistance for monitoring and dashboards of the Maritime Information System – BMKG in the Village for an early warning system for fishermen's weather in the waters																								
Outcome 2.2	Suistanable management of sea protection area																								
Output 2.2.1.	Identication and zoning of sea protection area - Field identification, - Village consultation																								
Activity	1. Field tracking of potential areas Zoning Map of Marine Protected Areas (DPL) and/or Preseved around the Makassar Strait Coast and Tomini Bay								x	x															
	2. Zoning of Marine Protected Areas (DPL) and/or Preseved around the Makassar Strait Coast and Tomini Bay									x	x	x													
	3. Preparation of academic studies of Marine Protected Areas (DPL) and/or Preseved around the Makassar Strait Coast and Tomini Bay										x	x	x												
Output 2.2.2.	Drafting of local regulation regarding Marine protected areas (MPAs) and / or essential ecosystem areas (EEAs) around the Makassar straigt and Tomini bay coasts																								

					Ta	ahu	n 1	(Ma	ret	202	:5)						Ta	ahu	n 2	(M	aret	202	5)		
De	escription of Item	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
	1. Preparation of Draft Regional Regulation on Marine Protected Areas (DPL) and/or Preseved around the Makassar Strait Coast and Tomini Bay													x	x										
	2. Consultation on the Draft Regional Regulation with BAPEMPERDA of the Donggala DPRD, Parigi Moutong DPRD and the Legal Department of the Donggala and Parigi Moutong Regency Governments													x	x	x									
	Communication and lobbying to include the draft Ranperda in the Propemperda (Program Formation of Regional Regulations)															х	x								
Outcome 2.3	Environmental Functions in critical land zones restored																								
Output2.3.1.	Rehabilitation of critical land in the PS working area with MPTS (Multi Purposes Tree Species)																								
Activity	MPTS nursery training for the ProKlim Group							х	х																
	Village nursery development in 11 villages								х	х	х	х	х												
	Nursery of 110,000 MPTS seedlings at the Village Nursery								х	х	х	х	х												
	4. Planting 110.00 seedlings in critical areas using the successful agroforestry method													x	х	х									

					Ta	ahu	n 1	Ma	ret	202	5)						Ta	ahu	n 2	(Ma	aret	202	5)		
De	scription of Item	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Output 2.3.2.	Increased mangrove rehabilitation area through womens group involvment																								
Activity	Field School of Mangrove Seedling and Cultivation Techniques for women in 13 villages						х																		
	2. Mangrove Nurseries by women in 13 villages						х	х																	
	3. Mangrove planting by women in 13 villages x 10 Ha (130 ha)							x	x	x															
	4. Monitoring and maintenance of mangroves by women in 13 villages											х			х			х			х			х	
Output	Rehabilitation of critical																								
2.3.3.	land in coral reef area													_					-						
Activity	Field School for making and cultivating corals Bioreeftek Method for young fishermen						x	х																	
	Facilitate the manufacture of bioreeftech media								х																
	Placement of bioreeftech media on coasts and coral reefs that need to be restored.									х	x														
	Facilitate monitoring and reporting on coral reef development										х			х			х			х			х		
	Social and economic ugh livelihood improvement																								
Outcome 3.1	Increase in micro/small businesses with innovation adaptation																								
Output 3.1.1	Development of small business eith adaptive capacity																								

					Ta	ahu	n 1	Ma	ret	202	5)						Ta	hu	n 2	(Ma	ret	202	5)		
De	scription of Item	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Activity	Training and assessment of sustainable livelihood assets													x	х										
	Business development studies, investment plans and marketing of climate adaptation innovation products														x	х	х								
	3. Workshop on business development plans, investment plans and marketing plans for climate adaptation innovation products																x	x							
	4. Community Organizing / Mentoring and Assistance in organizing village communities													х	x	х	х	х	х	x	x	x	х	x	x
Output 3.1.2	Development of successional agroforestry as a suistanable land use altenative																								
Activity	Sectional agroforestry system training							х																	
	Support for successional agroforestry development							х	х	Х															
	3. Community Organizing / Mentoring and Assistance in organizing village communities							x			x			x			x			x			x		
Output 3.1.3	Small-scale fishermen able to utilize adaptive knowledge and technology in fishing and aquaculture																								
Activity	There is a small-scale demersal fishery profile document													x	х										

					Ta	ahu	n 1 (Ma	ret	202	5)						Ta	ahu	n 2	(Ma	ret	202	5)		
De	scription of Item	1	2	3	4	5	6	7	8	9	10	11	12	Tahun 2 (Maret 2025) 12 1 2 3 4 5 6 7 8 9 10 11 12							12				
	Assistance with fishing gear for small-scale demersal fishermen															х									
	Provision of fishfinder technology for fishermen															х									
	Karamba/mangrove crab aquaculture training													х	х										
	5. Support for the implementation of aquaculture															х	x								
	6. Community Organizing / Mentoring and Assistance in organizing village communities													x	x	х	x	X	X	х	x	x	x	x	х
local policies to	Provision of instruments and o strengthen adaptation sure program sustainability of													X X X X X X X X X X											
Outcome 4.1.	The availability of climate change action adaptation policies at the district level monitored by the climate change working group, officially supported by the district goverment																								
Output 4.1.1	Estabilisment of climate change working group in donggala and parigi moutong district																								
Activity	Climate change FGD and per OPD							х	х																
	Team formation Initiator of API POKJA formation									х															
	3. Facilitate the preparation of the statutes of the API POKJA									х	x														
	4. Workshop on Formation of POKJA API in 2 districts											х													

					T	ahu	n 1	(Ma	ret	202	25)			Tahun 2 (Maret 2025)											
D	escription of Item	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
	5. Facilitating the Issuance of a Regent's Decree on the API POKJA in Donggala and Parigi Moutong districts																								
Output 4.1.2	Availability of Climate Change Action Plan (RAD API) Documentation for the Donggala and Parigi Moutong Districts.																								
Activity	Formation of Expert Panel													х											
	Document Preparation Desk by Expert Panel and API POKJA													х	x	x									
	3. RAD API Document Design Consultation															х	х								
	4. Regional Seminar on RAD API in Donggala and Parigi Moutong districts																x	х							
	5. Approval of RAD API Documents through Perbub																	х	х	x	x	x	х		
	6. Community Organizing / Mentoring and Assistance in organizing village communities													x	x	x	x	x	x	X	x	x	x	x	x
Output 4.1.3.	Promotion and disseminationof climate change handling actionsof climate change adaptation actions.																								
Activity	Social media campaigns on adaptation initiatives and actions						х	х	x	х	x	x	x	x	x	x	х	x	x	x	x	x	x	x	x
	2. Media Gathering						х						х						х						х
	3. Adaptation action festival																								

ANNEX 7. Result and Beneficiaries

Results / Output	Indicator		pient nefit	Line base	Target	Source Verification	Risk And Assumptions
		Direct	No Direct				
Component 1: Enhance	e access to source Pow	er For su	ıstainab	ility adaptation	n change climate at the le	evel village	
Result 1.1 Improvement access village through formation village proclimate	- Amount Pro- climate village	1,044	23.14 9	number 0	15 villages	Reception document proposal village climate by Ministry Environment Life And Forestry (KLHK)	Document administration No complete
Output 1.1.1: Commitment stakeholders interest to village Proklim	- Treatise meeting			number 0	1 Document (province and 15 villages)	Document treatise signed meeting by all stakeholders interest	Disagreement between participant
Output 1.1.2: Formation Policy Village For Adaptation Change Climate And Initiative Group ProKlim .	 Data collection and ProKlim proposal preparation Formulation Plan Action Adaptation Village in 15 Villages initiative There are 15 Decisions about Formation Manager ProKlim Group 			number 0	 100 villages in South Sulawesi meet condition registration ProKlim via SRN (System Registration National) Planning Village Plan Action Village and SK for group ProKlim in 15 villages 	 Document regulation village Document Regulation Head Village 	 Compilation regulation village constrained agreement department law regency Compilation Regulation This constrained by problem administration And agreement
Release 1.1.3 Proposal pro climate village in Donggala And Paris Moutong	- Amount proposal pro- climate village			0 Villages ProKlim - 0 has been enumerated - 0 has verified	 100 villages registered as village ProKlim via SRN 15 villages accompanied as village pilot ProKlim 	 Proposal document for 15 pro- climate villages - Letter decision group Visual documentation 	

Result 1.2 Improvement knowledge about adaptation And circulation information climate	- Percentage participant cadre school capable field do action adaptation change climate And do monitoring environment	1,044	23.14	number 0	70%	Report evaluation	Cadres do not capable to practice results training in term time project
Release 1.2.1 Improvement access to knowledge And information condition environment through cadre training in 15 villages	- Amount cadre trained in 15 villages	o tron a th	oning fo	number 0	30 cadres	Report training And monitoring	Limitations tool reduce effectiveness training
Component II. Repair en		_		nestry social,	renabilitation area critica	ii , aiiu proposai area	protect new.
Result 2.1: Management Forestry More Social Good in Sulawesi Output 2.1.1: Increased access to Forestry Social And revitalization holder access Forestry Social Increasing access to Forestry Social And revitalization holder access Forestry Social And revitalization holder access Forestry Social	 Total area area forestry managed social in a way sustainable Amount Decision Forestry Social New - Amount group Forestry Social that accepts improvement capacity 	514	13,51	number 0 - 6 existing Area PS area 4693 Ha - 0 New PS	- Utilization of 6 existing PS areas covering an area of 4693 Ha - 2 Suggestions Forestry Social covering an area of 3836 Ha with verification status, has get decision determination - There are 8 RKPS and RKT PS documents that are oriented towards on adaptation change climate	Report monitoring Document Decision Forestry Social New , Documents Plan Work Management	Overlapping overlap with license management other Activity No priority institution
Output 2.1.2: Zoning Area Forestry Social	 Designated area as zoning Forestry Social 			number 0	5,000 hectares	Map zoning	Activity No priority institution
Result 2.2: Management Area Conservation Sustainable Marine Resources (KKP)	Amount village with area protection new	135	2,761	number 0	10.8 Ha	Decree Area Conservation Waters in 10 Villages	Constraint political from government area in define area protect new Area
Output 2.2.1: Identification And				number 0	10.9 Ha	Map area proposed conservationDocumentation	Lack of baseline data from

Zoning Area Conservation Waters - Identification field - Consultation Village						Activity Presence	government area Donggala And Paris Moutong
Output 2.2.2: Compilation regulation area about Area Conservation Waters (KKP) and / or Area Ecosystem Essential (KEE) on the coast Makassar Strait and Bay Tomini .	- 1 Decision Minister Environment Life And Forestry (KLHK) 1 Draft Local regulation			number 0	1	- Document Decision - Design document regulation area	e- dependence about taking decision by KKP3K
Result 2.3 Recovery function environment live in the zone land critical	- Wide rehabilitated land	414	8.188	number 0	- Mangrove area of 10 ha - Area reef coral covering an area of 10 ha (5 villages) - Area Forestry Social 10 ha area	- Report monitoring	Limited tools - slows down the process
Output 2.3.1: Rehabilitation Land Critical in the Area Forestry Social with Species Tree All in one Purpose	- Wide Land Critical in the Area Forestry Social Planted Tree All in one Purpose			number 0	- Rehabilitation area 10 ha area	- Report monitoring - Documentation	Fail plant Because pass season Limitation time plant
Output 2.3.2: Improvements wide mangrove rehabilitation through involvement group Woman	mangrove area has been rehabilitated Number amount women involved			number 0	- 10 ha of critical mangrove land - 50 women	- Report planting Report monitoring + maps mangrove area	Compliance And availability seed
Output 2.3.3: Rehabilitation land critical in the area Reef Coral	- Area reef coral critical	through	ı improv	number 0	- 10 hectares	- Report monitoring activity rehabilitation reef coral	Growing media No in ideal conditions

Result 3.1: Improvement business micro / small with adaptation innovative	- Micro Business in 15 Villages Based on Public Proceed	1,044	23.14 9	- Potential data village - Business data micro in every village - Micro Business Data at the Office Cooperative s , Small Businesses and Intermediate	Validation business micro Still walk	Documentation activity Process notes Inventory data business micro in 15 villages	Limitations knowledge And capacity in development business micro
Output 3.1.1: Development business small with capacity adaptive	Amount group business with administration business complete Amount product available features And marketed			number 0	- 6 groups - 10 products Featured	Report monitoring	Lack of Trust Owner Business to Adaptive Company Profitability
Output 3.1.2: Development Agroforestry Succession as Use Land Sustainable alternative	- Area managed agroforestry in a way sequentially			number 0	300 Ha	Report monitoring	
Output 3.1.3: Fishermen scale small capable utilise knowledge And technology adaptive in arrest fish And aquaculture	Amount fishermen who use technology adaptive And knowledge			number 0	70% fishermen follow training	- Presence - Documentation activities - Report narrative	Doubt Fisherman To Facilities Provided Knowledge
	on instrument And polic				adaptation And ensure p		
Result 4.1: Availability policy adaptation change climate at the level monitored districts by Group Work Change Climate, supported in	- Amount policies produced by regency based on the Working Group - proposal	1,044	23.14 9	number 0	2 policies (1 in each district)	Document policy	Assumption : No There is existing policies, Risk: situation political hinder policy

a way official by regency government					formulation
Output 4.1.1: Formation Group Work Change Climate in the Regency Donggala And Paris Moutong	- Decision President about Formation Group Work Change Climate	number 0	2 Decisions	Document Decision	Assumption : No There is Group Work , Risk : situation political hinder policy formulation
Output 4.1.2: Availability Documentation Plan Action Change Climate For Regency Donggala And Paris Moutong	- Plan action	number 0	2 Documents	Document plan action	Assumption : No There is plan existing regional actions , Risk : situation political hinder formulation policy
Output 4.1.3: Promotion And distribution action Handling change climate	- Amount program promotion And product Education Information Knowledge (KIE) produced	number 0	2 events , 10 products	Material campaign , media release , video documentation	Assumptions: : Plan action change climate currently implemented d. Risk: Plan action Possible No can completed in term the time available. deadline time

Annex 8. Project Monitoring and Evaluation Plan

Project Monitoring and Evaluation Plan

Project Result	Indicators	Target	Sort	Monitoring methods &	Frequency	Responsibility
			by	tools		

Component 1: Improving a		limate change	adaptation sustainabilit	ty at the village level	
Outcome 1.1 ncrease in village access	- Number of pro -				
through the establishment	climate Villages				Monitoring and
of ProKlim villages					evaluation expert
Output 1.1.1:	- Minutes of				Monitoring and
Stakeholders' commitment	meetings				1
to ProKlim villages	meetings				evaluation expert
Output 1.1.2:	- 100 Villages				Monitoring and
Village Policies for Climate	collected data and				evaluation expert
Change Adaptation and	prepared for the				evaluation expert
ProKlim Group Initiatives	ProKlim proposal				
formulated.	- 15 Village				
	Initiatives				
	formulated Village Adaptation Action				
	Plan				
	- 15 Decree on the				
	Establishment of				
	ProKlim Group				
	Management				
Output 1.1.3	-Number of				Monitoring and
Proposed pro-climate	proposed pro-				evaluation expert
villages in Donggala and	climate villages				
Parigi Moutong	Danasatana				
Outcome 1.2	- Percentage of				Monitoring and
Increase in knowledge	cadre participants in field school able				evaluation expert
about adaptation and climate information					
circulation	to practice climate change adaptation				
Circulation	actions and				
	conduct				
	environmental				
	monitoring				
Output 1.2.1	- Number of trained				Monitoring and
ncreased access to	cadres in 15				evaluation expert
environmental condition	villages				evaluation expert
knowledge and					
nformation through					
cadre					
training in 15 villages					
Component II: Environmer	ntal improvement through	n strengthenin	g of social forestry reh	abilitation of critical area	s. and proposing new

protection areas			
Outcome 2.1 : Better management of	- Total area of social forestry area		Monitoring and
social forestry in the	managed		evaluation expert
Neck of Sulawesi	sustainably		
Output 2.1.1:	- Number of new		Monitoring and
Increased access to	Social Forestry		evaluation expert
Social Forestry and	Decrees - Number		evaluation expert
revitalization of Social	of Social Forestry		
Forestry access holders	groups receiving		
Increased access to	capacity building		
Social Forestry and			
revitalization of Social			
Forestry access holders			
Output 2.1.2:	- Area designated		Monitoring and
Zoning of Social Forestry	as Social Forestry		evaluation expert
areas	zoning		
Outcome 2.2:	- Number of villages		Monitoring and
Sustainable	with new protection		evaluation expert
management of Marine	areas		'
Protected Areas (MPA)			
Output 2.2.1:	- Field identification		Monitoring and
Identification and	- Village		evaluation expert
zoning of Marine	consultation		
Protected Areas			
Output 2.2.2:	- 1 Marine Protected		Monitoring and
Drafting of local	Area (MPA) decree		evaluation expert
regulations regarding	1 draft local		·
Marine Protected Areas	regulation		
(MPAs) and/or Essential			
Ecosystem Areas			
(EEAs) around the			
Makassar Strait and			
Tomini Bay coasts			
Outcome 2.3	- Area of		Monitoring and
Environmental functions	rehabilitated land		evaluation expert
in critical land zones			
restored	Ann a facition I		
Output 2.3.1:	- Area of critical land		

Rehabilitation of critical lands in Social Forestry areas with Multi-Purpose Tree Species	in Social Forestry area planted with Multi-Purpose Tree Species	Monitoring and evaluation expert
Output 2.3.2: Increased mangrove rehabilitation area through women's group involvement	Area of rehabilitated mangrove region Number of women involved	Monitoring and evaluation expert
Output 2.3.3: Rehabilitation of critical land in Coral Reef area	- Area of critical coral reef	Monitoring and evaluation expert
	economic resilience through livelihood improvement	
Outcome 3.1: Increase in micro/small businesses with innovative adaptation	- Micro businesses in 15 community- based villages progress	Monitoring and evaluation expert
Output 3.1.1: Development of small businesses with adaptive capacity	- Number of business groups with complete business administration - Number of flagship products available and marketed	Monitoring and evaluation expert
Output 3.1.2: Development of Successional Agroforestry as a sustainable land use alternative	- Area of agroforestry managed successively	Monitoring and evaluation expert
Output 3.1.3: Small-scale fishermen able to utilize adaptive knowledge and technology in fishing and aquaculture	- Number of fishermen using adaptive technology - And knowledge	Monitoring and evaluation expert

Outcome 4.1: The availability of climate change adaptation policies at the district level monitored by the Climate Change Working Group, officially supported by the district government	Number of policies generated by the district based on POKJA proposals		Monitoring and evaluation expert
Output 4.1.1: Establishment of Climate Change Working Group in Donggala and Parigi Moutong districts	- Decree on the Establishment of Climate Change Working Group		Monitoring and evaluation expert
Output 4.1.2: Availability of Climate Change Action Plan Documentation for the Donggala and Parigi Moutong Districts	- Action plan		Monitoring and evaluation expert
Output 4.1.3: Promotion and dissemination of climate change handling actions	- Number of promotional events and Knowledge Information Education (KIE) products produced		Monitoring and evaluation expert

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

Strengthening Community Adaptation Capacity Against Climate Change in the Sulawesi Neck Ecoregion

KONSORSIUM KUAT Karsa Institute – Komiu – Awam Green – Universitas Tadulako

Introduction

The main objective of this program is to increase the effectiveness and adaptive capacity of rural communities to the impacts of climate change in the ecoregion of the neck of Sulawesi, Central Sulawesi Province. And focuses on 4 components, namely:; 1). Strengthening the adaptation capacity of village-based communities, through the realization of the ProKlim village; 2). Improvement of ecosystems through strengthening social forestry, rehabilitation of critical areas, as well as the establishment of new protected areas; 3). Improving social and economic resilience through improving the livelihoods of the poor, women, and vulnerable groups, and 4). Provision of regional instruments and policies to strengthen adaptation actions and ensure program sustainability

In its implementation, this program has the potential to create risks. As a program organizer, the Strong Consortium is obliged to identify and conduct an assessment of risks and potential impacts that will result from the program, as well as to establish principles, guidelines and procedures to assess, avoid, reduce and offset potential social and environmental impacts. that are detrimental, and at the same time increase or enlarge the positive potential of the program.

This is also to ensure that the potential adverse social and environmental impacts that may arise as a result of each program activity are identified, and equipped with appropriate safeguards instruments to avoid, minimize, reduce and offset losses.

The Social and Environmental Policy Assessment is carried out by identifying 15 principles that are applied to this standard, with a description of the types and forms of risk, and risk reduction procedures are only given to principles that have potential impacts and risks that require further management for compliance. with the assessment and anticipation of risk, the number and scale of project risks will be smaller, the number of risks will be less, and the distribution will be less broad.

Next, Table 1. describes a checklist of the principles applied in the assessment of the environmental and social management plan, while Table 2 describes the Environmental and Social Management Plan of the project.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
16. Compliance with the Law	Х	
17. Access and Equity	X	
18. Marginalized and Vulnerable Groups		X
19. Human Rights	X	
20. Gender Equality and Women's Empowerment		X
21. Core Labour Rights	X	
22. Indigenous Peoples		X
23. Involuntary Resettlement	X	
24. Protection of Natural Habitats	X	
25. Conservation of Biological Diversity	Х	
26. Climate Change	Х	
27. Pollution Prevention and Resource Efficiency	X	
28. Public Health	X	
29. Physical and Cultural Heritage	Х	
30. Lands and Soil Conservation	X	

Potential Environmental and Social Impacts	Mitigation Action	Estimated Cost of Mitigation Action	Timeline (in quarters)
Compliance With The Law			
There is a possibility that some activity initiatives, budgeting and policies that will be produced by the village are not in accordance with the village authority, as well as with the direction and priorities of the annual budget set through a ministerial regulation.	 Conduct a study on the regulation of village authority in ministerial government regulations, regional regulations and village regulations. Conduct intensive coordination and consultation with the District Law Department, Provincial Legal Bureau and Village Community Empowerment Service (PMD) In situations where the delegation of authority does not occur because there are no village level regulations governing village authority, management can help facilitate the formation of related regulations. 	Integrated in 1.1.2 output. The birth of village policies related to climate change adaptation plans and the ProKlim group, activities; Number 2. Training on making village regulations; Number 4. Public consultation of Ranperdes	Q1
Several types of land use activities carried out by the Lauje indigenous people, have the potential to be inconsistent with Law 41 of 1999 concerning Forestry, as well as technical regulations for forest area management which have been set forth in the RPHJP (Long Term Forest Management Plan) KPH.	 Conduct ongoing coordination and consultation with KHP at Program Locations Conduct a spatial analysis of land use by the Lauje adat indigenous peoples Encouraging collaboration in the management of Forest Resources through various policy schemes that are available, and are acceptable Promote sustainable land use transformation in indigenous communities 	 Integrated with Exodus 1.1.3. activity 2. Assistance in the preparation and proposal of pro-climate villages, Activity 3. proposal for 24 Pro-Klim villages through the national registration system for climate change control, For areas that intersect with social forestry areas can be integrated with Output 2.1.1. Facilitate the preparation of the RKPS (Social Forestry Work Plan) and RKT PS (Annual Work Plan on Social Forestry) documents with climate change adaptation orientation for 8 permit holders 	Q1 - Q3 Q1 - Q3
Access and Equity		<u> </u>	
Project access to the parties, and vice versa, the access of the parties to	- Ensuring acceptance of the project implementation plan is carried out in pre-program implementation,	- Integrated in output 1.1.1 . activity ; 1. Launching of the program at the provincial	Q1

project management and resources is basically unequal and unbalanced, because it is influenced by various factors, both physical factors (location, distance) as well as socio-economic and cultural factors. The government has greater accessibility than the community. Even among communities, access and equity are differentiated. Coastal communities will have greater access than mountainous communities. This is due to geographical and socio-cultural factors. Highlanders, especially the Lauje, tend to be introverted and limit interactions with outsiders. Meanwhile, coastal communities are much more open, expressive and very accustomed to meeting various people.	and at the beginning of program implementation, through socialization and dissemination. Socialization includes explanations or positions and roles of the parties, including the community. - Project methods and approaches at the community level are not uniform and generalized - Complaint mechanism developed, socialized and operationalized by program management; - An affirmative approach can be used for more vulnerable groups	level, 2. Socialization of the program at the village level, 3. Mapping of program beneficiaries and development of complaint mechanisms and 4. GEDSI training for all Program Implementers	
Marginalized and Vulnerable Groups; Persons with Disabilities, the Elderly, Women, especially Women Heads of Households and Households, poor and extreme poor, and indigenous peoples are the social layers that have the highest individual/household vulnerability. This layer is the strategic target of the program. The problem is that this group tends not to have access to information and to participate in programs	 Management is required to provide policies and strategies for mainstreaming the plan group into the program The GEDSI principle becomes the standard for implementing activities so that everyone involved in implementing the program must have an understanding and perspective on GEDSI Technical guidelines for activities that require representation of marginalized and vulnerable groups, and the involvement of at least 30% of women. 	 Integrated with 1.1.1 output. activities, 2. Socialization at the village level activities 3. Mapping of beneficiaries, and 4. GEDSI training for all Program Implementers Also integrated in the activities in output 2.3.2, output 3.1.1, 3.1.2. and 3.1.3. 	From Q 1 to throughout the project period
Human rights			
Everyone who is directly or indirectly	- Applying the principle of FPIC, giving informed	- Integrated in 1.1.1 output. activity ; 1.	Q 1

affected by the program must respect and uphold their human rights. Including the free will of everyone to choose to be involved or not involved in the program, including providing an assessment and opinion on the implementation of the program.	consent, which is carried out freely and without coercion, which has been regulated in the Governor's Regulation (PERGUB No. 37 of 2012 concerning Free Prior and Informed Consent on the implementation of REDD+ in Central Sulawesi)	Program launching, 2. socialization at the village level, and 3. Beneficiary mapping	
Gender Equality & Women's Empowerment			
In coastal and highland communities in the East Coast and West Coast of Neck Sulawesi, women's access to public areas, including access to decision-making processes, has traditionally been unequal. Thus, inequality in program access has the potential to occur.	 Provide a Gender Inclusion Plan (SGIP) policy Provisions for the mandatory involvement of at least 30% of women in various organizational/group management structures, in meetings, training, delegation, etc. Encouraging the birth of women's leadership Uphold and implement gender equality policies in consortium member institutions 	- Generally integrated into all activities, technically it will relate to output 1.1.1. activities, 3. Mapping of beneficiaries, as well as GEDSI Training for all Program Implementers, and Output 2.3.2. Women Lead on mangrove rehabilitation	Q1, Throughout the project period
Core Labor Rights			
The core labor standards are a set of rights, which are part of basic, universal and indivisible human rights, namely; Freedom from forced labour, Freedom from child labour, Freedom from discrimination at work and Freedom to form and join trade unions, and to bargain collectively.	 Implementing SOPs for HR and Institutional Karsa Institute and SOPs for each member of the Consortium. Comply with the statement of the Code of Ethics and the basic values of the Karsa Institute and each member of the Consortium Comply with the provisions of the child protection policy of the Karsa Institute and each member of the Consortium 	- Integrated into all project activities.	Throughout the project period
Indigenous people			
It is possible that there are technical approaches (for example, agroforestry development) which and policy development, to a certain extent, will have an impact on changes in land use	- Applying the principle of FPIC, giving informed consent, which is carried out freely and without coercion, which has been regulated in the Governor's Regulation (PERGUB No. 37 of 2012 concerning Free Prior and Informed Consent on the implementation of	Integrated in output 2.1.2. activities 1. Participatory field tracking of new protection zones within the Social Forestry area and Outside the Social Forestry area Activity 2. Workshop on integration of	Q4 - Q6

techniques and systems for regulating and managing resources in indigenous peoples' territories.	 REDD+ in Central Sulawesi) Study of land use systems and traditional wisdom in natural resource management Development of sustainable land use techniques as much as possible integrated with traditional land use techniques 	utilization blocks, land use plans with detailed village spatial plans, and Output 3.1.2. activity 1. Training on the sectional agroforestry system, and activity 2. Support for the development of sectional agroforestry	
Protection of Natural Habitats			
Although not a conservation area, the Sulawesi neck ecoregion has natural habitats in coastal and highland areas. Protection of natural habitats is important to support living systems	 Do not carry out activities that directly or indirectly cause changes or damage to natural habitats Expanding protected areas, including protection of natural habitats Cultivation of coral reefs using bioreeftek techniques, to prevent damage to coral reefs in the provision of coral reef fragments 	 Integrated in output 2.1.1. activity 4. Arrangement of social forestry blocks in 6 existing social forestry areas, output 2.1.2., activities 1. Participatory field tracking of new protection zones within the Social Forestry area and Outside the Social Forestry area, outputs 2.2.1. activity 2. Zoning of Marine Protected Areas (DPL) and/or KEE around the Makassar Strait Coast and Tomini Bay and outputs 2.3.3. activities 1,2,3 and 4. 	
Pollution Prevention and Resource Efficiency			
Every activity (meeting, training, workshop, seminar) has the potential to generate waste.	 Implementation of rules and waste management, to manage waste activities as well as for education Reducing the use/consumption of packaged food and beverages 	Integrated in all activities	Q1 until the program ends
Nursery and cultivation activities have the potential to produce polybag waste	 Using used materials (reuse) such as plastic cups, plastic bags instead of polybags Considering the use of organic materials in place of polybags, such as bamboo stalks, sago leaves, palm leaves as a substitute for polybags 	2.3.1 Outputs. activities 1 – 4, Planting 110,000 seedlings in critical areas using the successional agroforestry method, Output 2.32. Activity 2: Mangrove nurseries by women in 13 villages and activity 3: Mangrove planting by women in 13 villages x 10 Ha (130 ha)	Q1
The use of iron-concrete as a shell mat as a medium for growing coral reefs can corrode	Consider replacing the concrete with stainless steel, or organic materials such as bamboo.	Outputs 2.3.3. activities 1. Field school for coral nursery and cultivation using the	

and pollute the waters		Bioreeftek method for young fishermen, and 2. Facilitating the manufacture of bioreeftech media	
Public health			
There will be increased mobilization of people during project implementation. in addition to movement, the implementation of this program will also lead to gatherings. Mobilization took place at the village and inter-village levels, and from village to district and province. And vice versa from district to village, from the city center in the province, to districts and villages, and Regional and national level to the province to the village.	 Reduce the frequency and range of staff movement with, duration of stay in the field; Provide field office to reduce frequency and range Paying attention to the determination of the status of covid 19 and the implementation of PPKM by the government Implementing Covid 19 prevention and handling procedures in the organization's work environment. 	- ntegrated into all project activities.	Throughout the project period
However, the highest mobilization intensity will occur due to the movement of program staff, which means movement from the provincial capital to the villages.			
Mobilization and gathering of people increase the risk of spreading infectious diseases, especially Covid 19.			