

### PART I: PROJECT/PROGRAMME INFORMATION

### **1.1. General Information of the Project**

Project/Programme Category	:	Small-Sized Project/Programme
Country/ies	:	Indonesia
Title of Project / Programme	:	Strengthening Community Adaptation toward Climate Change through
		ProKlim in Ecoregion Neck of Sulawesi Island
Type of Implementing Entity	:	National Implementing Entity
Implementing Entity	:	Kemitraan (Partnership for Governance Reform)
Executing Entity/ies		Consortium KUAT (Karsa, Komiu, AwamGreen, Untad)
Amount of Financing Requested	:	\$US 999,226

### 1.2. Background and Context of the Program

### 1.2.1. General Context

- 1. This project will be implemented in Ecoregion "Neck of Sulawesi Island" landscape which covers plateau that exteds 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 is; Makassar Strait and Tomini Bay (the largest bay in Indonesia). Geographically, general public of Sulawesi called west coast as "Pantai Barat" and east coast as "Pantai Timur".
- Administratively Ecoregion "Nect of Sulawesi Island" is located between two districts, which is in territory of Donggala District and Parigi Moutong District. Geographically, position both districts exactly intersects equator line, extending from north to south with coordinates position 0°42" N and 2°20" S, also stretching from west to east on position 119°45" E - 121°45".
- Overall, Donggala district consists of 16 sub-districts which covering 167 villages and whiled Parigi Moutong districts consists of 23 sub-districts which covering 284 vilages. Meanwhile on Ecoregion Neck of Sulawesi Island that consists of 9 sub-districts by Donggala district and 8 sub-districts by Parigi Moutong district within population 284.020 people.
- 4. The shape of Sulawesi Neck is thin and elongated caused pressure to conserve natural resources distributed widely on every sides. Then, the position between two open marine systems make this region directly affected by the marine climate dynamics of Makassar strait and Tomini bay which is always changing extremely. This issue lead increasing the climate that measured by intensity of hydrometeorological disasters. In agricultural sector, which is main source of livelihodd for local population, decreasing recorded in production and productivity cacao, coconut, and other main commodity on hightlands and coast of Sulawesi Neck Ecoregion.
- 5. The problem, increasing threats and risks of climate change impacts inverstly proportional with population adaptation capacity and environment carrying capacity. At this moment, the condition of ecoregion in critical situation. Baseline data show the degradation and deforestation increasing by time to time, cause expansion agriculture land, residence, also operation of illegal mining which is unplanned deforestation. In same time the damaged of ecosystem also happened on coast area; mangrove ecosystem and coral reefs with damaged rate reach 27% on Donggala district and 34% on Parigi Moutong district.
- 6. Decreasing of environment capacity directly proportional with increasing of poverty number in this region, this factor significantly increasing community and household vulnerability by the impacts of climate change. While on other case, increasing adaptation capacity in this region has many challenges. This effort requires objective, inclusive and systematic of initiative also adaptation action. This pre-condition is not available on every level, cause even the population or the local government haven't seen climate change as serious

issue, as urgent issue to respon it. Neck of Sulawesi Ecoregion, massively being prepared as supplier area of IKN (*The Nation's Capital*) that has been established through by Constitution No. 3 year 2022 about The Nation's Capital. This decision is welcomed and considered as a considered strategic by Central Sulawesi Government also Donggala, Parigi Moutong and Sigi districts which is these three districts geographically has strategic position and natural resources potential become support system of IKN. Historically, these three districts already have market relation with the city on east coast and north side of Borneo Island. Declaration of Central Sulawesi Province as support system of IKN declared through Governor Decision Number 504/117.1/DMBPR-G.ST/2022 about Support System Area for Nation's Capital. On grassroot level, coverage of IKN support area determined on this decision is Neck of Sulawesi Ecoregion, with focus support to supply food resources and construction material like stone mining production.

7. In addition to providing strategic opportunities, IKN also bring new challenges in the Neck of Sulawesi Ecoregion, especially for ecosystem conservation and sustainable livelihoods aspects. This is because the ecoregion area hasn't a protection policy, nor the area designated as coastal and terrestrial ecosystem protection area. Based on Ministry of Environment and Forest Determined Letter Number 8113 of 2018 about Forest Area, the area of conservation areas is only 1.8% or 8,524 hectare by ecoregion total area which is coverage 482,722 hectare. In oder to reduce the tendency of ecosystem degradation, improve socio-economic resilience, reduce the level of climate change vulnerability, improvement ecosystem and provide a climate regulation and institutional framework, then need a effort to encourage expansion of local protected areas, ecosystem restoration, improvement of sustainable livelihoods, improvement of adaptation capacity, reproduction of climate sensitive political policy and institutional development of climate change adaptation.

### 1.2.2. Environmental Context and Climate Change Impact

8. On Donggala district are exist 167 villages and Parigi Moutong district exist 283 villages that affected by climate change with different levels of vulnerability. 97% of the existing villages on both districts was in highly vulnerable condition of climate change, even 11% are categorized as most vulnerable; which is 27 villages in Donggala and 22 villages in Parigi Moutong. By 49 villages which categorized as the most vulnerable status, there are exist 20 villages will be prepared as ProKlim villages (*Climate Village Program*) and also gain empowerment as support system area of IKN.

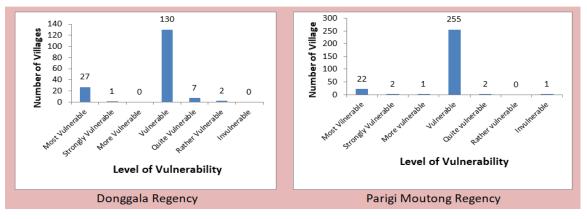


Figure 2. Graph of Climate Change Vulnerability (Data Source: Sidik, 2020).

### Seasonal and Precipitation Patterns on Neck of Sulawesi Ecoregion

 The Sulawesi Neck Ecoregion categorized as Non-Seasonal Zone (Non ZOM) which mean that area doesn't have clear patterns rainy season throughout the year, so it makes very impossible to prediction the pattern of rainy season and dry season. Non ZOM areas generally have characteristic two peaks of rain in a year (Equatorial Pattern). 10. Based on monthy rainfall data from 1981 until 2021, provides an overview the development of average precipitation on Sulawesi Neck Ecoregion ranging from 150 mm (medium category). During that time, this region has minimum precipitation recorded under 25 mm in 1998 and 2016, and the highest precipitation recorded over 300 mm in 1995. Despite having medium average precipitation, this region has a high intensity reach 100 – 150/hour or even possible more than 150mm/hour, which occurs at the peak of the rain season. High intencity of precipitation trend in same time as mark of higher the tendency of highintencity rain season moment on the year.

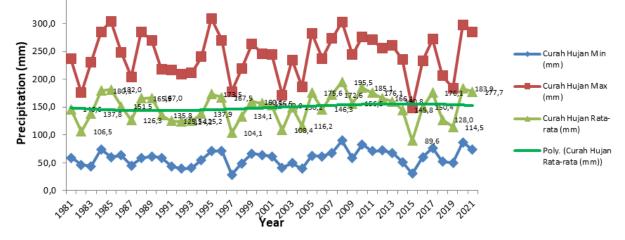


Figure 4. data on the development of rainfall in the Sulawesi neck ecoregion.

### Condition and Projection of Surface Temperature on Sulawesi Neck Ecoregion

11. Monitoring result of temperature condition last 21 years show an increasing trend of land surface temperatures in Sulawesi Neck Ecoregion. Increasing the average land surface temperature ranges from 1.85 °C – 2.85°C, if make comparison with precipitation data over 10 years, that comparison show the potential longer dry season cause reduced precipitation that accompanied by an increase the air temperature.

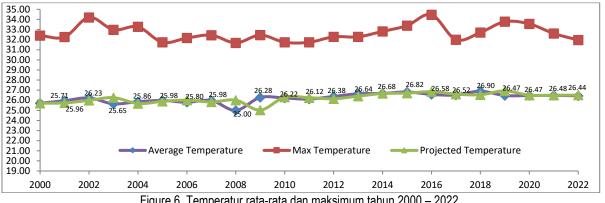


Figure 6. Temperatur rata-rata dan maksimum tahun 2000 – 2022.

12. Furthermore, by using BMKG (Institution of Meteorology, Cilmatology and Geophysic) about "High Resolution Cilmate Projection for Sulawesi Region" which is information dynamics and transitions of climate by processing composite precipitation and air temperature data, with reference years baseline 2006 - 2014, then the average temperature in Donggala and Parigi Moutong districts projected will increase between 1.85 °C - 2.85 °C in 2035, the land temperature on west coast which is part of Donggala districts will increase sharply compared land surface temperature on east coast which is part of Parigi Moutong district area.

 Based on time series data of Land Surface Temperature/Emissivity 8-Day L3 Global 1km counted from 2000 to 2021, average land surface temperature on Sulawesi Neck Ecoregion already increased as shown in the following figure:

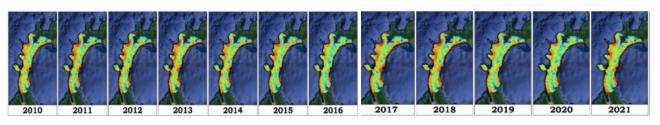


Figure 5. Land Surface Temperature Change 2010-2022.

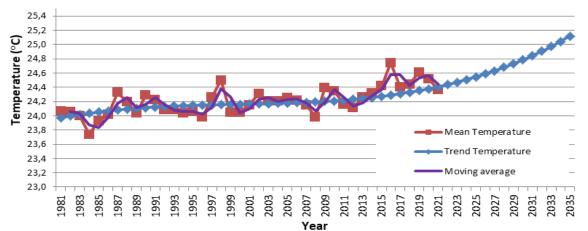


Figure 6. Prediction the increasing land surface temperature in Sulawesi Neck Ecoregion until 2035(data source: ERA5).

14. Increased average temperature accompanied with decreased average annual precipation affecting dry months will get longer than wet months. Like previously explained, decrease rainfall will increase the probality of high intensity precipitation at the peaks of rain season.

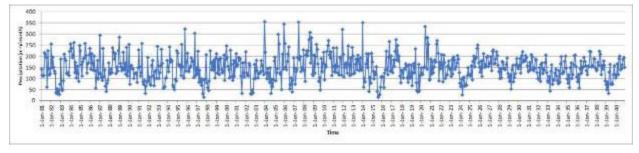


Figure 7. Predicted temperature increase in the Sulawesi neck ecoregion until 2035 (Data source: ERA5)

### **Dynamics and Transtition of Land Cover**

15. Forest very importan to tackling climate change, forest was the key to absorbing and save carbon emission in the form of biomass. Deforestation not only trigger decreasing forest ability to absorbing emisi, but caused relasing emission from forest carbon. In one context of adaptation, forest held very important roles. Until this time, forest still an alternative source of livelihoods for villagers, especially the poor vilagers. By the forest, communities very possible to use the wood and bamboo as contruction material. Other side, forest also provide additional food ingredients, also traditional medicine resources. For indigenous people, like Lauje tribe, which live in mountains of west coast, forests provide most their protein needs in the form of animal hunting. Forest also has important role in preventing flooding and erosion.

- Sulawesi Neck Ecoregion area reache 553,915 hectare, based on SK 8113 of 2018 about Forest Area is composed by: 1) Another Land Area 233.061 hectare, 2) Settled Production Forest 10,826 hectare, 3) Conversion Production Forest 6,264 hectare, 4) Limited Production Forest 131,546 hectare, 5) Protected Forest 92,549 hectare and 6) Conservation Forest Area 8,524 hectare.
- 17. Natural forest, agriculture and non forestry land cover data last 20 years shown different tendency. Deforestation trend for agricultural land monitored in both districts significantly increasing. In Donggala district increase for agricultural land class by 25% in the period 2000 to 2019, and decrease the forest cover class by 6%. Meanwhiled, during same time in Parigi Moutong district, forest coverd decreased 9% and increased 1.6% on agricultural dryland cover.

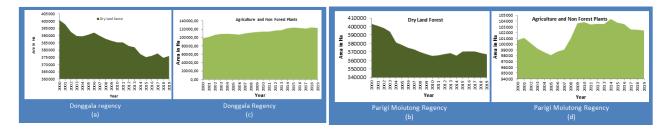


Figure 8. Forest cover and agriculture and non forest plant cover in Donggala and Parigi Moutong Regency.

18. Condition mangrove cover and fishpond area in both districts relatively identical. Significant decrease in mangrove cover occurred in two phases; early year 2000 and ahead of 2020. Increase in fish pont significantly happened; early 2000 and in 2013 until 2019. In Donggala district, mangrove cover decreased 27% and fishpond increased 700%, then in Parigi Moutong district mangrove cover decreased 34% and fishpond increased 879%.

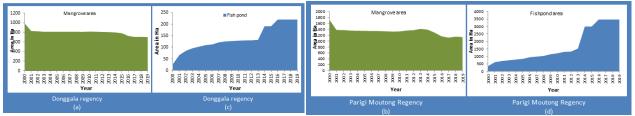


Figure 9. Mangrove cover and Fishpond area in Donggala and Parigi Moutong Regency.

- 19. The population who is live around the natural forest has high vulnerability by climate change impacts, in this case includes ecosystem changes then will hereditary impacts on ecological sector, social and mainly economic. Empowerment communities throught capacity building and scientific knowledge required to understanding the correlation or relation between tropical rainforest vulnerability and the communities, then determine the climate scenario option for the future.
- 20. Damaged forest ecosystem is reducing the ability to prevent erosion disaster, landslide and flood, and increase the risk hydrometeorology disasters in form like flood on rainy season and long-term drought. In Donggala districts 98,8% villages highly have flood risks and 90% has highly drought risk. Meanwhile, in Parigi Moutong district exist 76% villages in flood and drought risks situation.

Description	Donggala Regency			Parigi Moutong Regency				
Description	Flood Risk	%	Dry Risk	%	Flood Risk	%	Dry Risk	%
Most Risk	0	0	17	10	0	0	0	0
Strongly Risk	25	15	8	4.8	6	2.12	15	5.3
More Risk	109	65.3	118	71	121	42.8	127	45
Risk	31	18.6	24	14	87	30.7	72	25
Quite Risk	2	1.2	0	0	0	0	0	0
Rather Risk	0	0	0	0	0	0	0	0
Unrisk	0	0	0	0	1	0.35	1	0.4
No Data	0	0	0	0	68	24	68	24
Total	167	100	167	100	283	100	283	100

Table 2. Number of village based on the Level of Flood and Dry Risk in Donggala and Parigi Moutong Regency

21. This table shown intencity of flood and landslide disaster on 14 sub-districs, where is these villages become project target implementation. 210 incidents flood and landslide disaster last 1 year, since 2020 until 2021 in 14 sub-districts which is located on west coast, Donggala district with 137 cases; and east coast 73 cases part of Parigi Moutong district.

Disaster Site		Intensity of Disaster			
		Type of Disaster			
		Flood	Landslide	Flood	Landslide
Regency	Sub Distric		2020		2021
Donggala	Balaesang	2	2	2	4
Donggala	Labuan			1	1
Donggala	Sindue	2	1	2	2
Donggala	Sindue Tambusambora			12	5
Donggala	Sirenja			1	1
Donggala	Sojol	41		44	7
Donggala	Sojol Utara	2		4	1
Parigi Moutong	Tomini	2		3	1
Parigi Moutong	Mautong			2	1
Parigi Moutong	Mepanga	2		2	1
Parigi Moutong	Ongka Malino	9	1	21	
Parigi Moutong	Palasa			1	2
Parigi Moutong	Tinombo	6		11	8
		66	4	106	34

Table 3: Intensity of Disaster by Type in the Project Site

Sumber: BPS Kab. Donggala, 2012 - 2022

BPS Kab. Parigi Moutong, 2012 - 2022

22. Data shown, in 2 years (2020 – 2021) flood disaster increase 62% and landslide increase 12%. Climate change impacts also indicated by reduced productivity agricultural land like coconut, cacao and coffee. Very important to get attention is decreasing water resources for consumption that happen last view years. Overall, climate change really gives impact to population live in terms of economic, social and health aspects.

### 1.2.3. Socio Economic Context

23. Total population in both districts increasing year by year and relate with poor population increasing as well in same time. Data on Table 4, shown relatively same behavior, that is since 2012 until 2019 and in 2020 decrease the total of poor population.

	Donggal	a Regency	Parigi Mouto	ng Regency
Year	People (x thousand)	Poor People (x thousand)	People (x thousand)	Poor People (x thousand)
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 4. Population of Donggala and Parigi Moutong Regency

Sumber: BPS Kab. Donggala, 2012 - 2022

BPS Kab. Parigi Moutong, 2012 - 2022

- 24. The population of both districs very depending their life with land and marine ecosystem. Based on latest data, noted more than 59% population work in agriculture sector, 30% as fisherman and the rest work in trade and formal sectors. In agriculture sector, majority of population work on plantation crops. Food crop agriculture cultivated on limited scale, considering the undulating topography not provide enough land area to buid extensive rice fields. In this case, exception for *Lauje* tribe who lives in mountains. They cultivate food crops and plantation collectively, in different land units. *Lauje* tribe cultivating rice, corn and vegetables on shifting fields. According to Rosita (2017), this moment *Lauje* community already tend to build plantation than cultivate cause declining farm yields and the land is getting narrower.
- 25. As a coastal area, population in this area make coconut plants as leading commodities, beside that they also cultivate cloves that are tolerant of sea breezes, cocoa, coffee, pepper, and nutmeg.Climate change has caused decrease amout of production and productivity on plantation sector significantly. By analysis result production data for main commodities; coconut, cocoa, cloves and coffee, in West Coast coconut production has decreased 60% since 2017 with total production 33,151 ton become 13,328 tons in 2020. Meanwhile in East Coast, coconut production has decreased 17% with total production 9,362 tons become 7,694 tons. Decreased 38% production also happen for cocoa commodity; from 16,431 tons become 10,051 tons in West Coast. Same case in East Coast cocoa production decreased 24% from 5,662 tons become 4,271 tons. Cloves decreased 20% in East Coast from 751 tons become 599 tons, while in West Coast in 2020 no more clove production data found. The only one commodity increase is coffee, with number 60% from 73 tons become 117 tons in West Coast but different in East Coast already decrease from 38 tons become 21 tons. (Figure. 10)



Figure 10. Production Development of 4 Main Commodities in East Coast and West Coast

- 26. The expansion of agricultural land indicates the occurrence of agricultural extensification efforts. This is done as an effort to maintain production levels, either through the same commodities, or by seeking new commodities, especially short-term crops, such as corn, patchouli and beans. Another prominent alternative is the development of aquaculture, through shrimp and milkfish ponds. This can be seen from the increase in the area of the pond, which rose by 700% on the West Coast and 879% on the East Coast. However, the expansion of the aquaculture area has resulted in massive mangrove conversion, which has an impact on the sustainability of the livelihoods of small fishermen, who depend on reef fish whose life cycle is related to the mangrove ecosystem. The opening of mangroves also eliminates the function of mangrove forests as sediment traps. As a result, the sediment extends to cover the corals and has bleached corals. The results of the analysis of high-resolution satellite images show that coral bleaching has occurred on the coast of Balaesang, Tanjung, Tomini and South Tinombo. Damage to coral reefs will affect the livelihoods of small fishermen, who do depend on the availability of reef fish (demersal). Small fishermen, using rowboat fishing gear, or 5 HP boat engines, resulting in limited cruising range. This problem also applies to women fishermen, both as fishermen's wives and female household heads. In the Fisherman Community, every woman is ensured to be involved in fishing business. Either in post-capture treatment process, the management of fishery derivative products or even in fishing activities. Thus, the damage to mangroves, damage to the coral reef ecosystem will have a direct impact on small fishermen and women.
- 27. Socio-economic conditions that occur in this area will cause the percentage of poor people to be higher in 2021 compared to 2012. Climate change impact has affected the population livelihoods and hampered efforts to improve welfare, in both districts. The average income is below 30 US\$ (IDR 500,000) percapita/month, this issue occurs for 50,686 people (16.73%) in Donggala district and 67,716 people (15.28%) in Parigi Moutong district.
- 28. The demographic population distribution in the Sulawesi Neck Ecoregion is divided into two areas, namely: upland and coastal. The highland areas on the East Coast are inhabited by the Lauje tribe, while on the west coast Topo Unde, To Kaili and To (people) Balaesang have mingled with migrant communities who come from various places, such as To Kulawi, Minahasa people, Toraja and Bugis. The same condition also occurs on the East Coast, although with a smaller population of migrants.
- 29. The geographical condition of the Sulawesi Neck Ecoregion is different from other places, where the highlands and lowlands including the coast are one landscape unit that is bound by the same ridge. The physical distance between the highlands and lowlands is relatively close, with a clear division of territory. The *Lauje* tribe live on the top of the mountain and they define it as their territory, while To Kaili, Topo Inde and others live on the slopes, valleys, and foothills of the mountains which are directly adjacent to the sea. Based on the aspect of accessibility, the *Lauje* tribe are relatively backward and marginalized compared to the coastal communities. So that the concept of the Highlands is not sufficiently understood in terms of geophysics, but also this concept needs to be understood in the socio-political dimension. n this context, the social aspect of this understanding is equated with the term "remote" which refers to a place that is "geophysically" located apart from other places in the lowlands. While the political aspect is more synonymous with the term "inland" which in Indonesia is often used to refer areas that are far from the center of government. (Li, 2002)
- 30. Communities in this area have a tradition of mutual cooperation and collective work. This tradition is divided into several different tribal languages: *Mosiala Mplae, Sintuwu, all have the same meaning,* namely a system of bartering labor in work to manage agricultural land and other economic resources. *Lauje* tribe, have a land use concept that is practiced to this day, where they classify land based on land cover conditions, topography and land position; from the center of the settlement, so they are grouped into:
  - 1. *Pangale*, is space that should not be managed because it is located on a plateau and steep. This area has high biodiversity so it must be protected. They believe that the area is inhabited by ancestral spirits, this belief is a tradition that is highly respected by the *Lauje* from generation to generation.
  - 2. Jurame/ulate, is space that is commonly managed by the community is as a field, especially rice, sweet potatoes and corn with a shifting cultivation system.

- 3. *Pinojo'ong/jo'ong*, is a space where agricultural commodities grow. To differentiate from *Jurame/Ulate*, *Pinojo'ong/Jo'ong* are dominantly planted with secondary crops such as cloves, coconut and cocoa.
- 31. Lauje Indigenous People land use is a tradition of local wisdom which is a social capital that allows it to be revitalized and implemented into participatory and sustainable natural resource management in modern times. The integration of social capital into sustainable land management systems can be carried out in succession agroforestry development schemes, green agriculture and institutional systems that are expected to accelerate economic improvement while maintaining environmental stability that can increase the potential for adaptation to climate change.

### 1.2.4. Context of the Project/Program

- 32. To be able contribute to reducing global temperatures and reducing the risk of climate change impacts, the Indonesian government has ratified the Paris Agreement with Law Number 16 of 2016 concerning Ratification of the Paris Agreement to The United Nations Framework Convention on Climate Change. In addition, the Ministry of Environment and Forestry also issued Ministerial Regulation No. 33/MENLHK/SETJEN/KUM.1/3/2016 concerning Guidelines for Preparation of Climate Change Adaptation. In 2021, Indonesia will issue an NDC (nationally Determined Contribution) which is stipulated in PERPRES No. 98 of 2021 concerning the Implementation of the economic value of carbon for achieving nationally determined contribution targets and controlling greenhouse gas emissions in national development.
- 33. As an archipelagic country that has extensive coastal areas, islands and small islands, and is crossed by the equator, Indonesia is the country most at risk of climate change. Risk reduction of climate change impacts can be done through adaptation scenarios. Climate change adaptation is an effort made to increase the ability to adapt to the impacts of climate change, including climate diversity and extreme climate events so that the potential damage caused by climate change can be reduced, opportunities posed by climate change can be utilized and the consequences that arise can be resolved.
- 34. The neck of Sulawesi ecoregion is the most vulnerable landscape to climate change due to its geophysical shape, which is flanked by two marine systems and crossed by the equator. This situation causes weather patterns to be difficult to predict, always changing and extreme. Annual rainfall data shows a decreasing trend of rainfall, this data is directly proportional to the trend of increasing surface temperature. This trend has resulted in reduced water discharge, as well as the loss of surface springs in these regions. Although rainfall has decreased, data shows that the intensity of floods and landslides has actually increased in last two years. This event is related to the intensity of rain that falls on a high-water discharge scale and with a long duration of time. In addition to the direct losses and suffering caused by hydrometeorological disasters on the population in this ecoregion, they are also experiencing increasing socio-economic pressures due to declining incomes due to the significant decline in production of various commodities. In addition to the direct losses and suffering caused by hydrometeorological disasters on the population in this ecoregion, they are also experiencing increasing socio-economic pressures due to declining incomes due to the significant decline in production of various commodities. The activity of expanding ecological damage has an impact on increasing damage to coastal ecosystems including coral reefs. The damage created threatens the survival of aquatic organisms and the livelihoods of small fishermen who depend on demersal fisheries.
- 35. The program design is prepared to answer the problem by taking into account the suitability of the adaptation contribution target, in the NDC document stipulated by PERPRES 98 of 2021. The linkage, suitability and contribution of each component to the main program are described as follows. table:

	Table 5. Relation of Program Components with Key Programs and Contribution of National Adaptation				
Co	omponents	Program Key	Contribution		
1.	Strengthening the adaptation capacity of village-	<ul> <li>Strengthening Adaptation Capacity</li> </ul>	<ul> <li>Social Security and</li> </ul>		
	based communities, through the realization of the	<ul> <li>Strengthening the capacity of the</li> </ul>	Livelihoods		
	ProKlim villages	Community and its participation in planning.			
2.	Improvement of ecosystems through strengthening	- Protection of coastal areas	- Ecosystem and		
	social forestry, rehabilitation of critical areas, and	- Social Forestry	landscape		
	the establishment of new protected areas. local	<ul> <li>Reducing deforestation and Degradation</li> </ul>	resilience		
	government in the arrangement, expansion and	<ul> <li>Ecosystem Conservation and Restoration</li> </ul>			
	determination of new protected areas.				
3.	Improving social and economic resilience through	<ul> <li>Sustainable Plantation Farming</li> </ul>	- Economic		
	improving the livelihoods of the poor, women and	- Land Conservation	Resilience		
	vulnerable groups.	<ul> <li>Ecosystem Conservation and Restoration</li> </ul>	<ul> <li>Ecosystem and</li> </ul>		
			landscape		
			resilience		
4.	Provision of regional policies and instruments to	- Strengthening Adaptation Capacity	- Social Security and		
	strengthen adaptation actions and ensure program	- Strengthening Disaster Preparedness	Livelihoods		
	sustainability				

### Table 5. Relation of Program Components with Key Programs and Contribution of National Adaptation

- 36. Community involvement in climate adaptation needs to be increased because it is classified as moderate (Z.O et al., 2022). This project can provide reinforcement to the climate village program such as the Environment and Forestry Regulation provisions of the Ministry of No. P.84/MENLHK.SETJEN/KUM.1/11/2016. Villages Climate Program (ProKlim) is a national program that aims to increase the involvement of the community and other stakeholders to strengthen adaptation capacity to climate change and reduce greenhouse gas emissions as well to provide recognition of climate change adaptation and mitigation efforts that have been carried out that can improve welfare at the local level according to regional conditions (Ministry of Environment and Forestry, 2016). Empowering the community and collaboration of stakeholders are two strategies to improve ProKlim's performance at the site level (Faedlulloh et al., 2019; Ramdani & Resnawaty, 2020).
- 37. The project is also compliant and provides support to Central Sulawesi Regional Regulation of 2013 concerning Regional Spatial Plan of Central Sulawesi Province year 2013 2033 in which the spatial structure and pattern must be built with an environmental perspective (Perda, 2013). Environmental issues are reaffirmed through Regional Regulation No. 5 of 2021 which includes optimizing environmental services for community welfare (Perda, 2021).
- 38. If this adaptation program isn't implemented, there will be no effort to increase community adaptation in the Sulawesi Neck Ecoregion area. Implikasi ekologi adalah kerusakan hutan semakin meningkat, bahkan ekosistem mangrove diperkirakan punah pada tahun 2065; temperature dapat meningkat hingga 1,85 °C 2,85°C pada tahun 2035. As a result, residents in the Sulawesi neck ecoregion will be increasingly affected, especially those who live below the poverty line. The cost of disaster recovery caused by mangrove damage is one hundred times greater than the expenditure on conservation efforts (Cruz, 2022). Therefore, the implementation of this program is very important because it relates to the future of the community and its ecosystem as well as institutional strengthening which together will increase the resilience and community adaptation capacity.

### **Programme Objectives**

39. The main objective of this program is to increasing effectiveness and adaptive capacity of rural communities to the impacts of climate change in the Sulawesi Neck Ecoregion, Central Sulawesi

**Province**. This program is an important and urgent step to avoid greater losses and damages in the future as a result of the ongoing climate change. The program consists of several focuses:

- 1) Strengthening the adaptation capacity of village-based communities, through the realization of the ProKlim villages.
- 2) Improvement of ecosystems through strengthening social forestry, rehabilitation of critical areas, and the establishment of new protected areas.
- 3) Improving social and economic resilience through improving the livelihoods of the poor, women, and vulnerable groups
- 4) Provision of regional policies and instruments to strengthen adaptation actions and ensure program sustainability

	Project / Programme Components	Expected Concrete Outputs	Expected Outcomes	Amount (US\$)
1.	Strengthening the adaptation capacity of village-based communities, through the realization of the	1.1.1. Dissemination of Program information, preparation and acceptance of programs and providing enabling conditions for program success	1.1. Establishment of 24 new ProKlim Villages	169.054
	ProKlim villages.	1.1.2. Birth of village policies related to climate change adaptation plans and the ProKlim group		
		1.1.3. <b>Proposal</b> of 24 ProKlim Villages to the Director General of PPI		
		1.1.4. Increased knowledge of adaptation, as well as circulation of climate information.	Increase access and availability of knowledge and information on climate change.	
2.	Improvement of ecosystems through strengthening social forestry, rehabilitation of critical areas, and	<ul> <li>2.1.1. Revitalization of the Social Forestry Permit Holder Group and the social forestry licensing process</li> <li>2.1.2. New Terrestrial Protection Area Zoning</li> </ul>	2.1 Strengthening community access through social forestry and Expansion of terrestrial protected areas/zones in the	326.133
	the establishment of new protected areas.	<ul> <li>2.2.1 Identifikasi dan Zonasi Daerah Perlindungan Laut (DPL) dan/atau KEE di sekitar Pesisir selat Makasar dan Teluk Tomini</li> <li>2.2.2. Determination of Marine Protected Areas (DPL) and/or KEE around Makassar Strait Coast and Tomini Bay</li> </ul>	Sulawesi neck ecoregion. 2.2. Determination of 2 coastal protection areas by the local government in the form of DPL and/or KEE (Essential Ecosystem Areas)	
		2.3.1. Rehabilitation of critical land in PS working areas with MPTS (Multi Purposes Tree Species)	<ul> <li>Critical land rehabilitation in Social Forestry, Mangrove and Coral reef areas</li> </ul>	
		<ul><li>2.3.2. Women Leaders in Mangrove Rehabilitation</li><li>2.3.3. Coral Reef Rehabilitation Modeling Bio-reef tech Method, 10 Ha</li></ul>		

3.	Improving social and economic resilience through improving the livelihoods of the poor, women, and vulnerable groups.	<ul> <li>3.1.1. There are adaptation innovation efforts</li> <li>3.1.2 Development of social agroforestry as an alternative to sustainable land use</li> <li>3.1.3 Increase the income of small-scale demersal fishermen through the support of fisheries knowledge and information, fishing equipment and technology</li> </ul>	3.1. The development of micro/small businesses that are adaptive innovation	266.658	
4	Provision of regional policies and instruments to strengthen adaptation actions and ensure program sustainability.	<ul> <li>4.1.1 Establishment of API POKJA in Donggala and Parigi Moutong Regencies</li> <li>4.1.2 There is a Climate Change Adaptation Action Plan (RAD API) document for Donggala and Parigi Moutong Regencies.</li> <li>4.1.3 Promotion of climate change adaptation actions.</li> </ul>	4.1 Development of Climate Change institutions and actions in Donggala and Parigi Moutong districts	71.612	
	1. Project / Programm	e Executing cost		87.490	
	2. Total Project / Programme cost				
3. Project / Programme Cycle Management Fee charged by the Implementing Entity (if applicable)					
A	Amount of Financing Requested				

### Tabel 6. Project Calender

Milestones	Expected Dates
Start of Project / Programme implementation	September 2022
Mid-term Review (if planned)	Agustus 2023
Project / Programme Closing	September 2024
Terminal Evaluation	Oktober 2024

### PART II: PROJECT / PROGRAM JUSTIFICATION

### A. Project Component

- **Component 1**: Strengthening the adaptation capacity of village-based communities, through the realization of the ProKlim village
  - 40. 24 villages in the ecoregion of Sulawesi are the target locations of the program which are the villages that has the highest climate change vulnerability index. The vulnerability index is a function that is First Component : Influenced by the level of exposure, sensitivity and adaptive capacity. data shows the low local adaptive capacity caused by several factors, that are; a). Very limited institutions and social networks; b). The adaptation of technological is very low; c). Communication tools and climate information are not available; d). The absence of a disaster preparedness system; e). Inadequate irrigation

infrastructure, subdams and water reservoirs; f). Low average level of education; and, g), low average monthly income.

- 41. Investments to strengthen the community's adaptive capacity in this component, will focus on these aspects; development and strengthening of adaptation institutions at the villages, increasing access to information, communication and technology, developing disaster preparedness, providing water management facilities, and increasing social access. This aspect was chosen by considering the capacity and timing of program implementation, as well as considering strategies, which are related to efforts to encourage the development of independent and sustainable adaptation actions. Increasing the adaptation of capacity allows the community to plan, and continuously implement adaptation actions by utilizing the available resources in each household, as well as the available resources in the village in the form of village fund budgets. Increasing social access and expanding institutional relationships allow the community to systematically access program resources available to local governments. So, this intervention will be an investment that will stimulate widespread adaptation action.
- 42. The approach framework that will be used is the ProKlim or Climate Village Program. ProKlim is a program 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 and emission reductions as well as to provide acknowledgment of climate change adaptation and mitigation efforts that have been carried out that can improve welfare. at the local level according to regional conditions. in the 2021 NDC update, ProKlim is mentioned as a form of adaptation and joint mitigation at the village level, which is declared as a form of implementation of Article 13 of the Paris Agreement. The government of Indonesia is targeting 20,000 ProKlim villages by 2024. Moreover, the achievement of this component, in addition to increasing the community's adaptive capacity, will also contribute to the Indonesian government's efforts to achieve the ProKlim target itself.
- **Component 2 :** Improvement of the ecosystem through strengthening social forestry, rehabilitation of critical areas, and the establishment of new protected areas.
  - 43. This component includes a package of adaptation actions, which will contribute to the resilience of ecosystems and landscapes, in addition, considering that a large part of the community's livelihood sources are the agricultural and capture fisheries sectors, the results of component 2 will also be useful for increasing social security and livelihoods. These two aspects of resilience are part of the contribution of adaptation actions, which have been determined nationally in the 2021 NDC updated. Forests degradation, Mangrove Ecosystems and Coral Reefs from time to time has caused ecological and economic impacts, with an increasing level of risk. Extremely changing weather patterns have increased the threat of floods, landslides, droughts and marine transportation accidents (fishermen), but the risk is higher due to the decline in the carrying capacity of the ecosystem and the disruption of people's livelihoods.
  - 44. Repair and improvements in ecosystem protection will be carried out from the highlands to the coast, adjusting the shape of the landscape of Sulawesi. Ecosystem improvement will be carried out through Social Forestry, and rehabilitation of three types of ecosystems, which are; forests, mangroves and coral reefs. The similarity of the rehabilitation approach in these 3 different ecosystem types lies in the aspect of prioritizing community participation. This approach provides a fundamental difference when compared to rehabilitation projects, which are carried out (mainly) by the government, which rely on the involvement of contractors as third parties.
  - 45. In rehabilitation activities, in particular, the role of women will be prioritized in leading and rehabilitating mangroves. On the other hand, Coral Reef Cultivation will carried by the Youth Fishermen group (male and female), while forest rehabilitation will be carried out by the ProKlim Group consisting of men and women. Variations in gender, and age groups are deliberate designs taking into account various tendencies and suitability, which have taken into account their effectiveness. Rehabilitation activities include provision of

seeds, planting and maintenance. Provision of seeds, both MPTS (multi purpose three species) seeds for forest rehabilitation and mangrove seedlings will be carried out independently by the community through the village nursery system. Although the provision of seedlings is carried out on a community self-management basis, the consortium will take on the technical responsibility for ensuring the success of the nursery. The fulfillment of this technical responsibility will be carried out through the provision of cultivation and seedling training. After the training, the consortium will provide technical personnel to assist in the stages of planting to maintaining plants.

- 46. Coral Reef Cultivation Bioreeftek method will be a new idea in this area. This method has previously been practiced by consortium members on Kabalutan Island, Togean Islands. Bioreeftek was developed by the Research and Marine Observation Center of the Ministry of Marine Affairs and Fisheries since 2008. It is called Bioreeftek, because it uses coconut shells as a substrate or media for attachment of coral planula larvae for the natural development of new coral individuals. This method was chosen, considering the large number of coconut trees that grow in the coastal area of the neck of Sulawesi Island. The construction is simple and easy to make, so this method is relatively efficient and affordable by the community. Bioreeftek works by recruiting coral planula larvae naturally, this method makes this coral cultivation technology less destructive compared to other conventional methods. With bioreeftek, coral cultivation becomes an activity that is affordable for fishermen. Because it is cheap and easy, coral cultivation is not an "elite" activity that can only be done with expensive and complicated techniques.
- 47. These approaches will ensure the transfer of knowledge so that it is expected to pass on the tradition of ecosystem rehabilitation and restoration. In addition, this process also provides the ability for the community or village to carry out rehabilitation independently, including to meet village rehabilitation targets that will be calculated and determined by the village as part of the village adaptation policy, which will be generated through the previous component (Component 1).
- 48. In addition to carrying out rehabilitation, this program will initiate the establishment of new protected areas. This is to reduce the rate of damage, especially in areas that have high ecological value. Based on the status and function map of the Central Sulawesi Forest area, the protected area in the Sulawesi neck ecoregion is only 1.8% of the total area of the Sulawesi neck. This makes almost all areas, both on land and water, open access. Thus, the sustainability of ecosystem functions becomes very vulnerable and not guaranteed. This situation requires increased protection efforts through the initiation of the establishment of new, legal and institutionalized protected areas. The establishment of new protected areas is aimed at expanding the availability of protected areas in this area. taking into account the division of authority owned by the local government and village government. Therefore, there are new protected areas defined in 3 ways; namely 1). Determination of Protection zones to be allocated through the Social Forestry work area; and, 2). Determination of local protected areas, in private forest areas, private lands, village lands or customary lands based on traditional wisdom, voluntary and based on village autonomy; 3). Scheme of Marine Protected Areas and/or Mangrove Essential Ecosystem Areas (KEE), whose stipulation lies with the regional government. Therefore, The sustainability of Component 2 will be guaranteed by the government. Because, the determination of the new protected area (KEE/DPL) is based on local regulations. In regional regulations, articles concerning provisions for costs arising from government decisions are regulated as government obligations.

**Component 3 :** Improving social and economic resilience through improving the livelihoods of the poor, women and vulnerable groups

49. Improving community livelihoods will be part of the implementation of adaptation actions, which are aimed at reducing the level of vulnerability of poor households, especially households with the most vulnerable categories, namely; households with a female head of household, households with persons with disabilities, elderly households and households with extreme poverty. This is needed because the livelihood sector has a significant effect on the vulnerability of a household. It is known that the level of

vulnerability of households to climate change in one area is different from one another, even though they have the same exposure. Vulnerable households will have a much higher risk than non-vulnerable households. For the context of Central Sulawesi Province, this component has urgency, considering that the households targeted by the program are households that since 2018 have experienced disruptions or even lost their livelihoods due to being affected by the Earthquake, Tsunami and Liquefaction disasters. It is known that the post-disaster recovery process did not go well due to the pressure of the Covid 19 Pandemic. Therefore, the program will invest in improving the livelihoods of vulnerable groups, with a target of improving the target household income rate by 50% from the baseline, at the end of the program.

- 50. Investments for livelihood improvement will focus on three sectors; Agriculture, Small-Scale Demersal Fisheries and MSMEs (Micro, Small and Medium Enterprises). Program support includes, increasing business capacity, increasing management and marketing capacity, and providing a package of capital assistance and production equipment, which will be adjusted according to the results of the needs analysis. Determination of beneficiaries will be key to the effectiveness of this component. The selection of beneficiaries will be carried out by taking into account government data sources, especially DTKS (Social Welfare Integrated Data) data, because this data does not only contain the poverty rate, but also the vulnerability status of households. However, the determination of beneficiaries will still be based on the results of social mapping, which includes the preparation of a list with the village government, physical identification of the field, and village deliberations. To increase the accountability and transparency of the beneficiaries from the community, program management will provide a feedback and complaints from the community, program management will provide a feedback and complaint mechanism, for this stage and the implementation of the program as a whole.
- 51. To ensure the effectiveness of achieving the target, the designated beneficiaries will receive various support for increasing technical and managerial knowledge and skills, through trainings, courses, field schools and technical assistance in the form of mentoring. This technical support provides methodological differences between the design of this program and other social assistance projects. It is very likely that the target group of this program is a group that has received social assistance through government stimulant programs that were distributed in the form of BLT (temporary unconditional cash transfer) during the Covid 19 pandemic, but the form and purpose of the BLT program with the design of assistance in this program cannot be achieved. equated, because BLT focuses on efforts to maintain household consumption capacity, while assistance in this program is designed to increase production capacity
- 52. To ensure the sustainability of component 3's accomplishment, the businesses of women and vulnerable communities will be organized into an active and operational business groups by this program which will facilitate capacity building both personally and institutionally. The part for small business group's strengthening is by facilitating the issuance of various business and trading licenses imposed by the government. In addition, these business groups will register their existence with related OPDs/Departments, such as the Department of Agriculture, Marine and Fisheries Department, Department of Cooperatives and Micro enterprise Offices. The registration will open Registration will open the group's access to government programs and assistance in the future. In addition, the program will facilitate business group's connectivity with the relevant market and private sector, thereby opening up a wider business network, which will enable these business groups to keep growing and thriving. Furthermore, to ensure continuing support and partiality with the vulnerable groups in each of the villages, this program will facilitate 24 target villages to become inclusive villages. Inclusive village is a governance model that accommodates everyone's rights, affirms vulnerable members of the citizen (Disabled Persons, Elderly, female heads of households) and involving active, open community participation, respecting the diversity and also removing the obstacles. In Indonesia, the facilitation for the inclusive villages is being carried out by referring to the guidelines for inclusive villages facilitation which is

issued by the Director General of Village Community Development and Empowerment, Ministry of Villages-Development of Disadvantaged Regions and Transmigration of Indonesian Republic.

- **Component 4 :** Provision of regional policies and instruments to strengthen adaptation actions and ensure program sustainability
  - 53. Initiatives at the local level will be supported by institutional development and policy strengthening at the regional level. This stage will distribute authority and responsibility vertically to local governments in the districts of Donggala and Parigi Moutong. So that Adaptation will become an agenda that is internalized into the regional policy agenda, which has guarantees of sustainability in the form of funding commitments, as well as programs. At this stage the Adaptation agenda is transformed legally and formally so that it becomes a development orientation that has legal force and is binding. The adaptation agenda will experience expansion, due to the comprehensive nature of regional regulations and policies, covering all administrative areas and across various sectors, where technically adaptation objectives are oriented in the design of programs and activities of regional apparatus organizations (OPD).
  - 54. Technically, institutional and policy strengthening in the regions will be carried out through the formation of the API POKJA and the preparation of the API RAD Document. This will make the two districts the first districts to have the instrument. The preparation of RAD API as a regional policy will be prepared based on the Regulation of the Minister of Environment and Forestry No.P.33/Menlhk/Setjen/Kum.1/3/2016 concerning the preparation of guidelines for climate change adaptation actions and synchronized with RAN-API, the National Development Planning Agency (BAPPENAS). The ratification of the RAD API will be stipulated through a Regent's Regulation (Perbub)/Regional Regulation (PERDA) while the API POKJA will be ratified through a Regent's Decree.
  - 55. To integrate the implemented policy adaptation action plan, the consortium with BAPPEDA in the two districts will conduct a couching clinic for the preparation of the OPD strategic plan and renja as the basis for the preparation of the RKPD (Local Government Work Plan) which will be poured into the KUA PPAS (General Policy Priority Budget for the Temporary Budget Ceiling). ) which will then be discussed as APBD.
  - 56. Improving the level of community readiness and increasing awareness of farmer groups on the impacts of climate change is a combination for strengthening ProKlim institutions at the site level. Increasing the capacity of groups at the local level accompanied by the availability of software up to the provincial level is expected to bring out and support various creative community efforts that are in line with economic and environmental goals which are increasingly being recognized as conditions needed by sustainable development. Revitalizing social capital that has long been carried out by local communities and adopting creative ideas such as climate schools will certainly be a powerful institutional strengthening in increasing the capacity and effectiveness of community adaptation to climate change.

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

### 1. Economic and Social Benefits

57. This project will have a direct impact on climate change adaptation actions through building social resilience and livelihoods. By providing support for increasing business capacity, as well as modalities and marketing assistance in the small-scale demersal fisheries agriculture sector and micro-small businesses, to vulnerable households and extreme poor households. This support will have an impact on reducing household vulnerability, as well as increasing adaptive capacity, which will enable poor households to become more resilient to the negative effects and impacts of climate change. The implementation of collective adaptation actions, which will be held throughout the program implementation will increase community cohesiveness, and togetherness in facing various risks that arise as a result of climate change.

As people who have experience in dealing with and going through disaster situations, we and the majority of the community in the program locations are aware that solidarity and collectivity are very important social capital and are needed in dealing with emergency situations, for example as a result of natural disasters, which are one of the impacts of climate change.

58. Overall. The potential direct and indirect beneficiaries of this program are 29,448 people, which are distributed in 14 sub-districts and 24 villages in two districts, namely Donggala Regency and Parigi Moutong Regency..

### **1.Environment Benefits**

59. The implementation of the program is certain to provide substantial and sustainable environmental benefits, both in the forestry sector and in the coastal zone management. This program is projected to restore and repair 8529 ha of forest, 130 ha of mangroves and 10 ha of coral reefs through rehabilitation activities. This activity will be a corrective action, considering the tendency of destructive resource management that has been going on so far. In addition to restoring the ecosystem, this program will also initiate the establishment of two new protected areas, with the status of DPL (Sea Protected Areas) or KEE (Essential Ecosystem Areas). The establishment of a new protected area will be a very important conservation incentive in the Tomini Bay and Makassar Straits, along the neck of Sulawesi, an area with intensive marine activity, but no area.

### 2. Gender and Vulnerable Group Benefits

- 60. Gender is a cross cutting issue, so the gender mainstreaming aspect will color the entire project component. In the context of this project, increasing women's participation and access will be carried out through an affirmative approach, by stipulating a minimum representation of 30% of women at every meeting, training, composition of institutional administrators and in delegation matters.
- 61. The design of this program has been made with women in mind. This can be checked, on the principal and conceptual narratives and statements. This can also be checked from the design of the results as well as the derivatives of the activities that contain the activities allocated to women. The beneficiary format also explicitly prioritizes women, in the form of recognizing women as a vulnerable group. Furthermore, gender equity and empowering will be carried out with an approach based on the 3 pillars of the Gender Equity and Women Voice Framework as follows: consisting of ; 1). Building agency (aspiration and capabilities); 2). Relations; 3). Addressing structure.

### C. Cost-effectiveness

- 62. In order for the effectiveness and adaptive capacity of communities in the ecoregion to increase and strengthen, this project/program has formulated seven outcomes, namely; 1). Establishment of 24 new ProKlim Villages; 2). Increase access and availability of knowledge and information on climate change, 3). Strengthening community access through social forestry and expansion of terrestrial protected areas/zones in the neck ecoregion; 4). Determination of 2 coastal protection areas by local governments in the form of DPL and/or KEE (Essential Ecosystem Areas); 5). Critical land rehabilitation in social forestry, mangrove and coral reef areas; 6). The development of micro/small businesses that are adaptive in nature; and 7). Development of institutions and actions on Climate Change in Donggala and Parigi Moutong districts
- 63. The seven outcomes are a derivation of the main objective of this project/program after analyzing various secondary data and the results of interviews with several parties as well as the Rapid Rural Appraisal conducted by the KUAT Consortium Team consisting of Karsa Institute, Komiu, Awamgreen, and Untad.

64. The study conducted by the consortium also derived 19 outputs from the aforementioned six outcomes. Based on the activities that must be carried out to produce each output and have an impact on the outcome, the following table shows the cost of each project/program outcome.

Outcome	COST in US\$
Designation of 24 new ProKlim Villages	104.136
Increase access and availability of knowledge and information on climate change	64.918
Strengthening community access through social forestry and Expansion of terrestrial protected areas/zones in the Sulawesi neck ecoregion	50.729
Determination of 2 coastal protection areas by the local government in the form of DPL and/or KEE (Essential Ecosystem Areas)	21.032
Critical land rehabilitation in Social Forestry, Mangrove and Coral reef areas	254.372
The development of micro/small businesses that are adaptive innovation	266.658
Development of Climate Change institutions and actions in Donggala and Parigi Moutong districts	71.612

### Table 7. Costs required for each project/program outcome

- 65. Table 7 above shows that Outcome 6 has the largest need for funds, which is US\$ 266.658. The amount of funds will be allocated to 24 villages, to support the development of livelihoods for vulnerable communities and women. This proportion of the budget is very appropriate because it relates to increasing socio-economic resilience for the most vulnerable households, as the group most at risk of being affected by climate change. For the Donggala district, this budget is very strategic, because it coincides with the community's efforts to restore livelihoods after the September 28 2018 Earthquake and Tsunami. The Covid-19 pandemic is known to have hampered the efforts of disaster-affected communities to recover after the disaster. The second largest budget allocation was in Outcome 5 with a total of US\$ 254.372. Based on technical studies and experience, rehabilitation activities which will be fully carried out using AF funding, can technically be carried out independently (self-managed) by the community. In a sense, this activity does not require the involvement of a third party (contractor) as in the case of projects that are being implemented by the government in general. Implementation of activities by the community will increase the cash flow flowing into the village. So that it will have an impact on the village's economy. Furthermore, the third largest funding is to achieve result 1, which is US \$ 135,120
- 66. To determine the effectiveness of the investments listed in Table 7, an Economic Rate of Return (ERR) analysis was carried out. Prior to carrying out the ERR analysis; designing a model was carried out to understand the context of the project which consisted of project compartments and explanations of welfare economic theory on project outputs, outcomes and impacts. In addition to the investment value in the first and second years, the analysis also includes environmental values (deforestation of dryland forests and mangroves) and agricultural land. The economic values of the forests and agricultural land were estimated using primary data and available reference data (valuation based labor benefits/income). The economic valuation results in a project economic value of US\$ 1,472,107.94 (IDR 21,964,218,518.10)8/year. Table 8 shows the potential economic value consists of 53% of the economic value of the dryland forest deforestation, 2% of the economic value of the mangrove deforestation, and 45% of the economic value of the agricultural land production.

Tabel 8. Economic Value of the project compartments

Land Types	Quantity (ha; ha/year)	Value /ha/year (US\$/IDR)	Remarks
Dry land forest deforestation	390	US\$ 1,999.64 (IDR29,835,192.31)	Potential TEV US\$
Mangrove forest deforestation	15	US\$ 1,939.04 (IDR 28,931,034.48)	<b>1,472,107.94</b> (IDR <b>21,964,218,518</b> .
Agricultural land	1680	US\$1,601.15 (IDR 23,889,600.00)	<b>10</b> ) /Year

The investment value (US\$ 999,226 ) and economic value were used in the economic analysis to obtain an NPV value of US\$ 2,146,932.74 (IDR 32,032,773,178.32), and an ERR of 54.9% (Table 9). This relatively high level of effectiveness is a very strategic opportunity in an effort to increase the income of the local community while at the same time strengthening their level of resilience to climate change. Conversely, if the condition of the ecoregion remains in the status quo condition, it will cause a loss of US\$ 1,5 million (IDR 21.9 billion) per year. Even if the AF project which carries the mission of Proklim Village is implemented, it will contribute to an environmental benefit value of US\$ 134,046.01 (IDR 2 billion) per year and to a gender benefit value of US\$ 67,023.01 (IDR 1 billion) per year.

Year	Cost	Benefit	Present Value
	US\$ 1,325,337.07	US\$ 662,448.57	US\$ -662,888.49
0	(IDR19,774,360,384.96)	(IDR 9,883,898,333.15)	(IDR -9,890,462,051.81)
	US\$ 1,084,366.69	US\$ 809,659.37	US\$ -254,358.63
1	(IDR16,179,022,133.15)	(IDR 12,080,320,184.96)	(IDR -3,795,094,396.47)
	US\$ 441,632.38	US\$ 883,264.77	US\$ 378,628.59
2	(IDR6,589,265,555.43)	(IDR 13,178,531,110.86)	(IDR 5,649,233,157.95)
	US\$ 220,816.19	US\$ 1,251,291.75	US\$ 818,024.72
3	(IDR3,294,632,778.00)	(IDR 18,669,585,740.39)	(IDR 12,205,133,365.94)
	US\$ 147,210.79	US\$ 1,324,897.15	US\$ 865,634.63
4	(IDR2,196,421,852.00)	(IDR 19,767,796,666.29)	(IDR 12,915,485,043.32)
		US\$ 1,472,107.94	US\$ 1,001,891.93
5	US\$ 0 (IDR 0)	(IDR 21,964,218,518.10	(IDR 14,948,478,059.40)
			US\$ 2,146,932.74
		(IDR 32,032,773,178.32)	
		54.9%	

Table 9. Economic Analysis of the project (NPV and ERR)

67. Sustainability of the achievements guaranteed by the availability of API (Climate Change Adaptation) institutions, from the village until district level. This institution is an achievement as well as a sustainability strategy. Institutional strengthening ensures that API institutions will be functional or functional. so that they have the ability to manage access and allocate resources to continue to carry out adaptation actions, including sharing lessons learned and replicating adaptation actions.

### D. Alignment with National and Sub-National Sustainable Development Strategies

### **National Development Strategies**

- 68. National policy directions are outlined in the 2020-2024 RPJMN document, covering building the environment, increasing disaster resilience, and climate change consisting of: (a) Improving the Quality of the Environment; (b) Improving Disaster and Climate Resilience; and (c) Low Carbon Development. Furthermore, related to the direction of increasing climate and disaster resilience, it is carried out through strengthening the convergence between disaster risk reduction and climate change adaptation.
- 69. This policy direction is stated in the strategy for Increasing Climate Resilience, which is implemented by implementing the National Plan for Climate Change Adaptation (RAN-API) in priority sectors, through: (a) Protection of Vulnerability in the Coastal and Marine Sector, either in the form of strengthening ecosystem-based adaptation infrastructure, public awareness, technology development, and diversification of the livelihoods of coastal communities; (b) Protection of Water Security in Climate Risk Areas, through increasing the supply of raw water and protecting against water damage; (c) Protection of Food Security against Climate Change; and (d) Protection of Public Health and the Environment from the Impact of Climate Change.
- 70. This program is designed by the consideration of the government's commitment to climate change control as stated in the 2021 NDC updated document, especially on the adaptation element, which are to realize economic, social and livelihood resilience, and ecosystems and landscapes.
- 71. The results of this program are also related and will contribute to efforts to achieve SD Goals Indonesia, namely goals related to goals1: no poverty, Goals 5: gender equality, Goals 13: climate action, Goals 14: life below water; Goals 15: life on land, and goals 17. partnership for the goals.

### Sub-National Sustainable Development Strategies

- 72. The direction of the Central Sulawesi Provincial Development policy is set out in the 2021-2024 RPJMD document, which is stipulated through Regional Regulation No. 13 of 2021 concerning the RPJMD. The RPJMD 2021-2024 is prepared by taking into account and internalizing the Governor's Regulation No. 5 of 2021 regarding plans for environmental protection and management.
- 73. In the regulation, it is stated, the purpose of the regulation is; 1). an increase in the area of protection functions, in particular areas that function to provide regulatory and water storage services and services to provide biodiversity (genetic resources and species habitat); 2). Guaranteed availability of quality water for life and sustainable development; 3). improving the quality of land, water, air and sea; 4). Improving the condition of coral reef ecosystems, seagrass beds and mangroves, especially in the area around the utilization and conservation zones sea; 5). the minimal risk of natural disasters and the negative environment borne by the community; 6). ensuring environmental support for sustainable food production; 7). strengthening institutional and governance support in implementation; and 8). h. Environmental protection and management plan in a sustainable manner
- 74. Based on this, it can be ascertained that this program design has relevance and conformity with the direction of local government policies.

### E.Complience with National Technical Standard

75. This program will facilitate the strengthening of adaptive capacity through the ProKlim Village framework in 24 villages. The process of village and community preparation and preparation, proposals, and strengthening of ProKlim Villages will be carried out by taking into account the Minister of Environment and Forestry No: P.84/MENLHK-SETJEN/KUM.1 concerning the Climate Village Program. To achieve this outcome, several outputs and activities are related to the making of village regulations, both in the form of

Village Regulations and Perkades, the procedure for which will refer to Permendagri No. 111 of 2014 concerning Technical Guidelines for Drafting Village Regulations.

- 76. In relation to social forestry, this program has plans to revitalize 6 social forestry institutions that already have permits, as well as 2 proposals for social forestry, which have been verified but have not yet obtained permits, so this program will focus on accelerating the issuance of permits, to be further facilitated in the preparation of RKPS. and RKTPS as regulated in Permen LHK No. 8 of 2021 concerning Forest Management and Preparation of Forest Management Plans, as well as the use of Protection Forests and Production Forests.
- 77. Meanwhile for coastal areas, the management concept will be prepared with reference to the technical management standards based on Law Number 1 of 2014 concerning Management of Coastal Areas and Small Islands. In a more technical context, the implementation of the rehabilitation of mangroves and coral reefs using the Bioreeftek method which is part of the coastal area, will be carried out with reference to the PEPPRES Number 121 of 2012 concerning Coastal Rehabilitation and Small Islands. In this regulation, rehabilitation activities include planning, implementation and maintenance. Meanwhile, in an effort to build adaptation institutions at the district level, as well as provide adaptation policy documents, technical facilitation will refer to the Minister of Environment and Forestry Regulation No.33 of 2016 concerning Guidelines for the Preparation of Climate Change Adaptation Action Plans by involving various sectors in its implementation.

### F.Learning and Knowledge Management

- 78. There are three important elements that are of concern to each component of the program, namely orientation to knowledge management, communication strategies, and appropriate learning systematics. These three things play an important role in climate change adaptation efforts because they are related to the development of the knowledge capacity of the parties. Some specific and linear activities that will support this case are as follows:
  - a) Encourage district governments to socialize the Climate Change Adaptation Action Plan. This is intended to be coordination and management knowledge, updating issues that develop in the village to the sub-district level, and synthesizing data and information from lessons learned. From here, it is hoped that the effectiveness of the Pokja API will increase by making joint plans, conducting joint monitoring, and updating information regularly.
  - b) Socializing the monitoring and early warning system for Climate Change Adaptation as well as informal climate education that can be used by various groups.
  - c) Increase the effectiveness of stakeholders in documenting and disseminating project outputs and outcomes and capturing changes that occur.
- 79. The process and results will be documented in writing, visually and audio-visually, stored and processed into document products, information products and learning materials, in the form of social media content, tutorials, infographics, news, short films, journals, learning materials, as well as in the form of simple empirical guidelines and disseminated online and offline by taking into account audience segmentation; Community, government and academic community. The choice of media and methods of disseminating information will be adjusted to the audience. For the community, teaching materials can be distributed online or offline, in more diverse forms, such as infographics displayed in public places, short film screenings, and learning discussions. As for the government, learning outcomes can be packaged in the form of policy briefs, which are shared through discussions, seminars and audiences. For the academic community, learning can be in the form of journals, diktats or other teaching materials distributed on various platforms, including through lecture activities that can be carried out by Tadulako University, the largest university in Central Sulawesi that is part of this consortium.

### G. Consultative process

- 80. During the planning of this project / program, meetings were held with various parties, both in the district, sub-district and village cities. In the city of Palu, a meeting was held with the Governor of Central Sulawesi Province and expert staff in the field of Community, while the related OPD was the BLH of Central Sulawesi Province, the meeting was aimed at gathering policy support from the provincial government, as well as discussing policy directions related to adaptation, both those that have been implemented or will be done in the future. Currently adaptation is not specifically a policy direction, because local governments have not yet received sufficient understanding about it. However, the Governor supports adaptation action initiatives in Central Sulawesi.
- 81. Forestry Service and POKJA PPS Central Sulawesi, NGO's Community and several academics. In addition, meetings have also been held with the Head of the Dampelas-Tinombo Forest Management Unit (KPH) in order to obtain information about various activities and programs carried out by KPHs in the Ecoregion. In Donggala district, consultations have been carried out with the deputy regent and the regent of Donggala. Likewise with the regent of Parigi Moutong, consultations have been carried out in the Tinombo area. At the community level, consultations have also been carried out with the traditional leader of Sindue, which is related to local wisdom in the project area. And the most important thing is that the Rapid Rural Appraisal has been carried out by meeting vulnerable groups in the village, such as farmers, fishermen and housewives and the poor.
- 82. The consultative process will still be carried out through participatory approaches and two-way communication patterns by exploring and identifying vulnerable groups and their specific problems. These results will be integrated into the program and have monitoring and evaluation indicators, and a separate section.
- 83. Based on the results of consultations and field observations, the Consortium did not find the potential for duplication of projects/programs from other funding sources. Although there are other projects implemented by the government (KPH) with funding sourced from Forest Investment Program (FIP). This project focuses on improving the management of the State Forest Area in the working area of KPH Dampelas Tinombo which covers 10 villages and 4 sub-districts. The 10 villages in question include: Karya Mukti, Malonas, Lembah Mukti, Oncone Raya, Sigega Bersehati, Bondoyong, Sintuwu Raya, Sipayo, Siweli and Sibualong. Of the 10 villages, only one village was identified with the proposed area of the Consortium, namely Sigega Bersehati Village.
- 84. Although not the same, the orientation of the FIP2 -supported KPH program does not have the potential to conflict with this Program Design. On the other hand, project outcomes can be mutually reinforcing and complementary. For example, in the aspect of improving state forest management in the area of KPH Dampelas Tinombo. The results of this program are expected to strengthen effective management capabilities so that they can help reduce the rate of deforestation and forest degradation, the adverse effects of which have increased the risk of disaster for the community. Proyek FIP 2 di KPH Dampelas Tinombo, this project is called the "Promoting Sustainable Community Based Natural Resource Management". Project using a grant from the World Bank. This project lasted for 5 years, starting on June 29 2016 and ended on December 31 2021. To ensure the synergy and complementarity between this project and the results achieved by the FIP2 project, the KUAT consortium will identify and track the achievements of this project in the field, FIP2 target groups included. The results of the identification will be used to analyze opportunities and decide wether to continue or not to continue with the results achieved, including considering the possibility of using or not using the same target group.

### H.Justification for Funding Requested

85. The project intervenes to increase the effectiveness and adaptive capacity of communities to climate change through the optimization of land, coast and sea, and as a main component is expected to reduce the level of vulnerability of gender-based and millennial communities to the impacts of climate change in the ecoregion of the neck of Sulawesi. In terms of biophysics, topography and a large and distributed investment area, AF support in the form of grants will greatly assist in achieving the project objectives as

planned. Funds will be allocated to all major project activities to realize climate change adaptation actions in the Sulawesi neck ecoregion.

Component 1 Strengthening the adaptation capacity of village-based communities, through the realization of the ProKlim village

- 86. Baseline (without AF): Without AF, efforts to realize Component 1, which includes the establishment of 24 ProKlim Villages, Increasing access and availability of Climate Knowledge and Information, supported by the provision of maritime information system instruments, will be difficult to realize. As previously explained, the community as well as the current government are not even in the situation of being informed about the climate vulnerability they are experiencing. Even in villages with very vulnerable status though. Under these circumstances, of course, not much can be expected to be done in order to increase adaptive capacity.
- 87. Additionally (with AF): Through the support of AF, the accelerated growth and development of the community's adaptive capacity through ProKlim Village Development and the availability of knowledge and information as well as ownership of early warning technology will be realized more quickly. the scheme will be jointly supported by competent local managers and supported by policies and various stakeholders. In the end, community adaptation will strengthen and make them less vulnerable to climate change. There will be 24 ProKlim villages and those that function according to the principles and principles of sustainable development.

Component 2 Improvement of the ecosystem through strengthening social forestry, rehabilitation of critical areas, and the establishment of new protected areas.

- 88. Baseline (without AF): Without AF, the current situation will continue, with an upward trend, due to the increasing ecological challenges of the Sulawesi neck ecoregion, including its relation to the State Capital. The current situation is that the situation in question is deforestation which increases periodically, including the conversion of mangroves into ponds, which also contributes to the destruction of coral reefs. from the socio-economic aspect, the current situation is described as an increase in poverty, and a significant decline in the production of leading commodities since 2017. This is exacerbated by the increase in floods and landslides triggered by the intensity of very heavy to extreme rains. This situation will further increase vulnerability, and endanger the community which is already very vulnerable to climate change.
- 89. Additionally (with AF): Scenarios featuring AF support suggest that land, coastal and marine areas will constitute a functional system. Donggala Regency as the owner of the largest fishermen in Central Sulawesi Province will contribute significantly to the province's marine fisheries production. Likewise, mangrove areas will improve and can support aquaculture systems in coastal areas. Forest cover has the potential to increase in quality, with future economic prospects with an increase in productive tree populations. This will increase the assets of poor households. With such conditions manifested, the welfare of the community can bring them out of climate vulnerability.

Component 3 Improving social and economic resilience through improving the livelihoods of the poor, women and vulnerable groups

90. **Baseline (without AF):** poor households and vulnerable groups do not have many opportunities to improve their economic status. Overall productivity in the region is declining, which will further reduce employment. This is exacerbated by the increase in consumption costs due to inflation, and the lack of economic recovery due to the Covid 19 Pandemic. The current regional government is not in a strong

enough condition to effectively immediately restore the people's economy. This can be seen from the ineffectiveness of reducing poverty. In addition, the government's financial capacity is declining, due to refocusing, as well as a reduction in APBD revenue posts due to a decline in the realization of state revenues.

91. Additionally (with AF): managerial, technical support and AF modalities will be a stimulus for the efforts of poor households and vulnerable groups to start productive enterprises, which will give them the ability to help themselves. Improving the ability to live will increase adaptive capacity and at the same time reduce the level of vulnerability of poor households and vulnerable groups from the impacts of climate change.

Component 4: Strengthening local and formal local institutions that are oriented to the sustainability of the program implemented through the ProKlim policy.

- 92. **Baseline (without AF):** Local wisdom will be further degraded without AF support. People's knowledge and understanding of climate change will remain minimal and make them more vulnerable. Moreover, the community action plan on climate change will also be doubted to be realized in the future without AF's support.
- 93. Additionally (with AF): AF support will increase the level of community readiness in climate change adaptation. The existence of climate schools, business networks among millennials and the existence of an action plan for climate change adaptation will guarantee the sustainability of the achievements produced by the project components so that ProKlim and Village Forests will have a positive impact in the future.

### I. Sustainability

- 94. Scenarios of program sustainability are provided from village to district level. At the village level, sustainability will be driven by a functional Village ProKlim institution. This institution has a mechanism for planning, budgeting, implementing evaluation activities, and has responsiveness and is dynamic, so that it is capable of dealing with and solving changing problems, which develop over time. These institutions rely on the leading role of the community, which increases understanding and gains increased organizational and climate change management capacity.
- 95. At the district level, sustainability assurance is determined by the active role of the functional API Pokja. It is driven by cross-sectoral and multi-stakeholder elements. The API Pokja agenda is contained in the RAD API, which has been internalized into regional policies. the same is the case with village RAD which is internalized with village policies.

### i.1. Financial Sustainability

96. This project will leave Institutions from Village to District level. Institutional, designed to be internalized in regional and village governments, so that the adaptation action agendas as outlined in the RAD and RADesa are government action agendas, which are carried out collaboratively, across sectors and across actors, coordinated by the Pokja API in the regions and in the village. These relationships, institutional arrangements and financial responsibilities are regulated in regional regulations as well as village regulations that regulate and establish Pokjas at each level. Financial support can be in the form of finance, facilities or programs. Support in the form of programs/activities is usually more flexible and broad, the programs/activities referred to are programs/activities that are oriented towards achieving regional adaptation goals and targets and are measurable. Programs like this can be implemented technically in each regional apparatus organization, or institutions that are part of the Pokja. Financial sustainability can also be pursued through raising public funds, involving the private sector through CSR or by developing creative events for public donations. All scenarios are reliable to be implemented by functional institutions.

### i.2. Institutional Sustainability

97. Institutional sustainability is carried out by establishing an emphasis on working groups at the village and district levels. Institutional sustainability will be prepared early on with long-term targets. Institutional

sustainability will be built by preparing a committed and capable management. Two things that are formed and grown through intense interaction, systematic capacity building, and critical and open learning space. In addition, institutions will also be supported by the development of detailed and applicable organizational work mechanisms. The organization's work mechanism also regulates the type and scale of responsibility for each management section, as well as a periodic accountability and evaluation system to assess the organization's performance and assess the organization's efforts in achieving organizational goals, which increases adaptive capacity.

### i.3. System Sustainability

98. Institutions provide a way of working for the organization, in the form of statutes, SOPs, and clear accountability mechanisms. Meanwhile, the institutional agenda has been set forth in the RAD and RADsa API which is the mandate of the local government and village government, which is charged with the integration of its implementation efforts by the Pokja API.

Adaptation actions are carried out in an integrated manner, either directly by the API Working Group, as well as through regional apparatus organizations and member institutions of the API Working Group with API Pokja funding and funding attached to their respective institutions. An adaptation program monitoring mechanism will be established to ensure the effective course of adaptation actions. An annual evaluation meeting will be held as part of monitoring the organization's performance and adaptation actions in the regions.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impact and risks – further assessment and management required for complience
Compliance with the Law		
Access and Equity		
Marginalized and Vulnerable Groups		
Human Rights		
Gender Equity and Women's Empowerment		
Core Labour Rights		
Indigenous Peoples		
Involuntary Resettlement		
Protection of Natural Habitats		
Conservation of Biological Diversity		
Climate Change		
Pollution Prevention and Resource Efficiency		
Public Health		
Physical and Cultural Heritage		
Lands and Soil Conservation		

### J. Table 10. Environmental and Social Impact and Risk

### 99. Table 11. Table of Environmental and Socail Risk Management

Risk	Mitigation Action	Related to output
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.	<ul> <li>Conduct a study on the regulation of village authority in ministerial government regulations, regional regulations and village regulations.</li> <li>Conduct intensive coordination and consultation with the District Law Department, Provincial Legal Bureau and Village Community Empowerment Service (PMD)</li> <li>In situations where the delegation of authority does not occur because there are no village level regulations governing village authority, project management facilitating the initiation of the formation/composition of regulations/regulations</li> </ul>	Integrated in 1.1.2 output. <i>The birth of village policies</i> <i>related to climate change adaptation plans and the</i> <i>ProKlim group,</i> activities; Number 2. Training on making village regulations; Number 4. Public consultation of Ranperdes
Several types of land use activities carried out by the <i>Lauje</i> indigenous people, have the potential to be inconsistent with Law number 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) developed by forest management unit ((KPH)	<ul> <li>Conduct ongoing coordination and consultation with KHP at Program Locations</li> <li>Conduct a spatial analysis of land use by the Lauje adat indigenous peoples</li> <li>Encouraging collaboration in the management of Forest Resources through various policy schemes that are available, and are acceptable</li> <li>Promote sustainable land use <b>scheme</b> in indigenous communities</li> </ul>	<ul> <li>Integrated with output 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,</li> <li>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</li> </ul>
Access and Equity Project access to the parties, and vice versa, the access of the parties to 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.	<ul> <li>Ensuring acceptance of the project implementation plan is carried out in pre-program implementation, and at the beginning of program implementation, through socialization and dissemination. Socialization includes explanations or positions and roles of the parties, including the community.</li> <li>Project methods and approaches at the community level are not uniform and generalized</li> <li>Complaint mechanism developed, socialized and operationalized by program management;</li> <li>An affirmative approach can be used for more vulnerable groups</li> </ul>	<ul> <li>Integrated in output 1.1.1 . activity ; 1. Launching of the program at the provincial 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</li> </ul>

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.		
Marginalized and Vulnerable Groups		
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	<ul> <li>Management is required to provide policies and strategies for mainstreaming the plan group into the program</li> <li>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</li> <li>Technical guidelines for activities that require representation of marginalized and vulnerable groups, and the involvement of at least 30% of women.</li> </ul>	<ul> <li>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</li> <li>Also integrated in the activities in output 2.3.2, output 3.1.1, 3.1.2. and 3.1.3.</li> </ul>
Human rights	-	-
Everyone who is directly or indirectly 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.	<ul> <li>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 REDD+ in Central Sulawesi)</li> </ul>	<ul> <li>Integrated in 1.1.1 output. activity ; 1. Program launching, 2. socialization at the village level, and 3. Beneficiary mapping</li> </ul>
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.	<ul> <li>Provide a Gender Inclusion Plan (SGIP) policy</li> <li>Provisions for the mandatory involvement of at least 30% of women in various organizational/group management structures, in meetings, training, delegation, etc.</li> <li>Encouraging the birth of women's leadership</li> <li>Uphold and implement gender equality policies in consortium member institutions</li> </ul>	<ul> <li>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</li> </ul>
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	<ul> <li>Implementing SOPs for HR and Institutional Karsa Institute and SOPs for each member of the Consortium.</li> <li>Comply with the statement of the Code of Ethics and</li> </ul>	<ul> <li>Integrated into all project activities.</li> </ul>

Freedom to form and join trade unions, and to bargain collectively.	<ul> <li>the basic values of the Karsa Institute and each member of the Consortium</li> <li>Comply with the provisions of the child protection policy of the Karsa Institute and each member of the Consortium</li> </ul>	
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 techniques and systems for regulating and managing resources in indigenous peoples' territories.	<ul> <li>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 REDD+ in Central Sulawesi)</li> <li>Study of land use systems and traditional wisdom in natural resource management</li> <li>Development of sustainable land use techniques as much as possible integrated with traditional land use techniques</li> </ul>	<ul> <li>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</li> <li>Activity 2. Workshop on integration of 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</li> </ul>
Involuntary Resettlement		-
This project has no possibility of Involuntary	-	-
Resettlement. coercion in all its forms is contrary		
to the basic values of the consortium members		
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	<ul> <li>Do not carry out activities that directly or indirectly cause changes or damage to natural habitats</li> <li>Expanding protected areas, including protection of natural habitats</li> <li>Cultivation of coral reefs using bioreeftek techniques, to prevent damage to coral reefs in the provision of coral reef fragments</li> </ul>	<ul> <li>Integrated in output 2.1.1. activity 4. Arrangement of social forestry blocks in 6 existing social forestry areas,</li> <li>output 2.1.2., activities 1. Participatory field tracking of new protection zones within the Social Forestry area and Outside the Social Forestry area,</li> <li>outputs 2.2.1. activity 2. Zoning of Marine Protected Areas (DPL) and/or KEE around the Makassar Strait Coast and Tomini Bay</li> <li>and outputs 2.3.3. activities 1,2,3 and 4.</li> </ul>
Conservation of Biological Diversity		
<ul> <li>In accordance with the Law number 5 of 1990 about Conservation of Biological Natural Resources, protection of Biological Diversity</li> </ul>	- Based on the program scenarios' review, it is certain that there are no risky activities that could cause damage to the ecosystem or that	<ul> <li>related to output 2.1.2 activity 1 tto</li> <li>related to output 2.31. activity 4. Planting 110.00 seedlings in critical areas using the successful agroforestry method</li> </ul>

<ul> <li>are carried out in conservation areas designated by the government in the form of National Parks, Nature Reserves, and Wildlife Reserves. This program is carried out outside and does not intersect with conservation areas;</li> <li>moreover, the Consortium has an understanding that the distribution of Biological Diversity has a wider scope compared to areas formally designated as conservation areas.</li> </ul>	<ul> <li>can threaten and eliminate species that are part of the Biological Diversity.</li> <li>On the other hand, this project has the potential to have an impact on the recovery and expansion of the Biological Diversity protection area with the improvement of terrestrial and coastal ecosystems and the establishment of new protected areas.</li> <li>This project also seeks to educate the villagers to increase the efforts of the society in order to protect natural ecosystems and biodiversity.</li> </ul>	- related to output 1.1.4. activity 1 to 4
Climate Change		-
This project does not generate impacts that increase the risk of climate change. Except for the opposite effect	<ul> <li>Based on the assessment of all types of activities in this project, this project does not contribute to the increasement of carbon emissions;</li> <li>The program does not facilitate the activities of beneficiaries and partners, which have the potential to increase emissions and could have an impact on the ecosystem, for example: related to the land clearing and management, the use of chemicals, and the use of destructive tools and materials in fisheries</li> </ul>	Related to Output 1.1.3, Output 1.1.4. Output 2.1.2, Output2.3.1.
Pollution Prevention and Resource Efficiency	-	-
Every activity (meeting, training, workshop, seminar) has the potential to generate waste.	<ul> <li>Implementation of rules and waste management, to manage waste activities as well as for education</li> <li>Reducing the use/consumption of packaged food and beverages</li> </ul>	- Integrated in all activities
Nursery and cultivation activities have the potential to produce polybag waste	<ul> <li>Using used materials (reuse) such as plastic cups, plastic bags instead of polybags</li> <li>Considering the use of organic materials in place of polybags, such as bamboo stalks, sago leaves, palm leaves as a substitute for polybags</li> </ul>	<ul> <li>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)</li> </ul>

The use of iron-concrete as a shell mat as a medium for growing coral reefs can corrode and pollute the waters	<ul> <li>Consider replacing the concrete with stainless steel, or organic materials such as bamboo.</li> </ul>	<ul> <li>Outputs 2.3.3. activities 1. Field school for coral nursery and cultivation using the Bioreeftek method for young fishermen, and 2. Facilitating the manufacture of bioreeftech media</li> </ul>
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. 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.	<ul> <li>Reduce the frequency and range of staff movement with, duration of stay in the field;</li> <li>Provide field office to reduce frequency and range</li> <li>Paying attention to the determination of the status of covid 19 and the implementation of PPKM by the government</li> <li>Implementing Covid 19 prevention and handling procedures in the organization's work environment.</li> </ul>	- ntegrated into all project activities.
Physical and Cultural Heritage	-	-
The program has a low risk of damage or disruption to the Physical and Cultural Heritage	<ul> <li>This project is not conducted on a cultural heritage object site and does not have any activities that could potentially cause physical or non-physical damage to the Physical and Cultural Heritage</li> <li>On the other hand, this program values and respects the knowledge and the culture of the local community. Therefore, it has an orientation, in order to decide or consider the methods used based on the adoption of good practices sourced from the local knowledge</li> </ul>	
Lands and Soil Conservation		
This program has a low risk of damage and degradation of Lands and Soil	- This project is implemented by taking into account the principles of sustainable development such as not using chemical fertilizers and other toxic	Related to Output 1.1.2, Output 1.1.3 Output 1.1.4,

<ul> <li>materials,</li> <li>This project has no activities that could have the potential to change the shape and structure of the soil.</li> <li>This project has positive impacts on soil conservation, through land cover improvement</li> </ul>	Output 2.1.2, Output2.3.1, and Output 3.1.2
---	---

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

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

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

H. Rusdy Mastura The Governor of Central Sulawesi Province	Date July, 11, 2022
DR. Drs. Kasman Lassa, SH., MH Regent of Donggala District	Date July; 5 , 2022
Samsurizal Tombolotutu Regent of Parigi Moutong District	Date July, 7, 2022

### **B.** Implementing Entity Certification

Provide the name and signature of the implementing Entity Coordinator and the date of signature provide also the project/programme contact person's name, telephone number and email address.

I certify that this proposal has been prepared and accordance with guidelines provides by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (..... List here....) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compiliance with the Environmental and Social Policy of the Adaptation Fun and on the understanding that the implementing entity will be fully (legaly and financially) responsible for the implementation of this project/programme

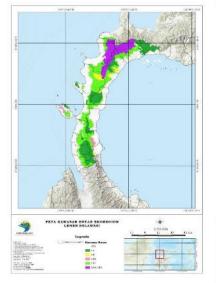
Edy Wicak	KONSORS	Contraction for the State of th	
D . 11	,06,2022	Tel and email: 0852 4127 6576	ediwicak@gmail.com

### Annex

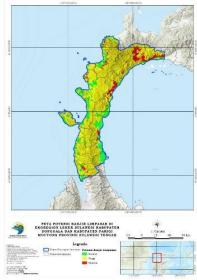
# UPDINT UPDINT











## Annex 1 : The Map of Intervensiion The Neck of Sulawesi Ecoregion

### A. Result Framework

### Annex 2. RESULTS FRAMEWORK

RESULTS/OUTPUT	INDICATOR	BASE	TARGET	SOURCE VERIFICATION	RISK AND ASSUMPTION
Component I: Strengthening the ada	ptation capacity of village-based communitie	s, through the realization of	ProKlim villages		•
Outcome 1.1. Establishment of 24 new ProKlim Villages	<ul> <li>24 Villages that are very vulnerable to climate change carry out integrated and systematic adaptation actions to reduce the risk of climate change</li> <li>24 Villages are designated as ProKlim villages and make systemic efforts to increase grades</li> <li>24 ProKlim working groups were formed.</li> <li>The existence of planning documents that include; development planning, capacity building and institutions of the ProKlim group.</li> <li>At least 50% of the village area has identified potential for biodiversity, economic potential, potential disturbances, risks and others.</li> <li>The existence of village regulations related to climate adaptation plans.</li> <li>Land cover in the protected zone remains 100% sustainable.</li> <li>Community capacity increased by 50% in climate adaptation scenario</li> </ul>	<ul> <li>SIDIK data 2020.</li> <li>Time series of land cover dynamics and transition from 2000 to 2019.</li> <li>The target village is the most vulnerable village to climate change based on Sidik data, but does not know the status and risks faced so that it does not have systemic efforts in adaptation</li> </ul>	<ul> <li>24 new ProKlim villages, with increased adaptation efforts so as to achieve ProKlim Lestari village status at the end of the program.</li> <li>Increased effectiveness of climate change adaptation in 24 Villages through the application of the concept of community and institutional empowerment in the management of human resources and natural resources in one unit.</li> <li>Improve the capacity of women and youth in long - term climate change adaptation .</li> </ul>	<ul> <li>Document of climate change vulnerability and risk profile for 24 villages.</li> <li>The results of the status assessment verification determined by the Directorate General of PPI.</li> <li>Activity Report.</li> <li>Monitoring and evaluation reports.</li> <li>The delineation cartometric map of the identification of potential assets for climate adaptation scenarios.</li> </ul>	<ul> <li>Access to the PPI directorate has increased, both with the Central office and the Sulawesi PPI Center.</li> </ul>
Output 1.1.1. Dissemination of program information, preparation and acceptance of programs and providing <i>enabling conditions</i> for program success	<ul> <li>Socialization is carried out at the provincial and village levels by presenting relevant stakeholders</li> <li>The implementation of the adaptation program is known and received</li> </ul>	0	In Q1 the Governor of Central Sulawesi, the Regent of Donggala and Parigi Moutong, launched the program Relevant OPD, other	<ul> <li>Activity</li> <li>Documents</li> <li>Media</li> <li>announcement</li> </ul>	

Output 1.1.2. The birth of village policies related to climate change adaptation plans and the ProKlim group .	<ul> <li>support</li> <li>24 Village Regulation (PERDES) Adaptation Action Plan</li> <li>24 Head of Village Regulation (PERKADES) Formation of ProKlim Group Management</li> </ul>		parties receive initial information about the program, and provide support for activities	-
Output 1.1.3 Proposal of 24 ProKlim Villages to the Director General of PPI	<ul> <li>The Sulawesi Area Climate Change Control Center (BPPI Wilayah Sulawesi ) assists the ProKlim village proposal</li> <li>Communication and coordination is established with BPPI Sulawesi</li> <li>The BPPI team provides assistance and technical assistance in the proposal and Strengthening of ProKLim</li> </ul>	0	Q1 – Q2	Activity documentation
Outcome 1.2. Increase access and availability of knowledge and information on climate change	<ul> <li>Government and public attention to climate change information and impacts</li> <li>The number and diversity of information sources is increasing</li> <li>The amount and intensity of information received by the public</li> </ul>	0	Q1 – Q2	<ul> <li>Activity documen tation</li> <li>Knowled ge survey results</li> </ul>
Output 1.2.1. Increased knowledge of adaptation, as well as circulation of climate information	<ul> <li>The community has application-based information and communication devices that are integrated with the BMKG real time information system (Badan Meteorology, Climatology and Geophysics)</li> <li>Increased knowledge of the government and the public about climate change</li> <li>Communities have knowledge</li> </ul>	0	Q1 – Q2	<ul> <li>Activity documen tation</li> <li>Knowled ge survey results</li> </ul>

Outcome 2.1. terrestrial protected areas/zones in the Sulawesi neck ecoregion	<ul> <li>and understand the risks and impacts of climate change</li> <li>Knowledge and information on climate change are used to formulate adaptation actions</li> </ul> tems through strengthening social forestry <ul> <li>5000 Ha new protected area set</li> <li>The new protection area is sourced from the protection zone within the social forestry area and/or the protection zone based on local wisdom</li> <li>Effective social forestry management of 8529 Ha</li> <li>Community capacity in social forestry management increased by 50% from the 2022 baseline.</li> <li>There is an update of the RKPS and RKT documents.</li> <li>There is a map of social forestry zoning blocks .</li> <li>150 members of the social forestry group are able to understand the functions, duties and roles well.</li> <li>30 people have facilitation engineering skills.</li> </ul>	<ul> <li>The total area of protected areas in the neck of Sulawesi integration is 8,000 ha or 1.8 % of the total area.</li> <li>PIAPS Revision VI.</li> <li>Increase women's access to control over quality livelihood assets and sustainable.</li> <li>6 Locations of social forestry that do not yet have an RKPS that require follow-up.</li> <li>Integrating social forestry schemes into ProKlim adaptation scenarios.</li> </ul>	Affirming and establishing zoning in social forestry areas, especially protection zones, so that they are maintained intact as natural forests that contribute to reducing GHG emissions and buffer areas that strengthen the carrying capacity and capacity of the environment	<ul> <li>Activity Report.</li> <li>6 RKPS and RKT- PS documents.</li> <li>6 SK social forestry groups.</li> <li>block maps in PS and ProKlim profiles.</li> <li>ADART and PS management SOP.</li> </ul>	<ul> <li>Social forestry policies have not changed.</li> <li>There was no opposition from the village government/KP H and related OPD.</li> <li>There is no force of major.</li> <li>Stable political, social and economic conditions</li> </ul>
<b>Output</b> 2.1.1. Revitalization of the Social Forestry Permit Holder Group and the social forestry licensing process	<ul> <li>The use of 6 existing PS areas covering 4693 Ha</li> <li>2 The proposal for social forestry covering an area of 3836 hectares with verification status, obtaining a determination decree,</li> <li>Availability of 8 RKPS and RKT PS documents with climate change</li> </ul>	<ul> <li>Currently 2 villages have proposed social forestry and verified the verifier covering an area of 3836 ha</li> <li>There are 6 existing PS licenses covering an area of 4693 Ha</li> </ul>	Q1-Q3	<ul> <li>Activity</li> <li>Report.</li> <li>Land Use Map of</li> <li>PS area.</li> <li>A copy of the PS area use narrative document</li> </ul>	

	adaptation orientation				
Output 2.1.1. New Terrestrial Protection Area Zoning	<ul> <li>5000 Ha new protected area set inside and outside social forestry area</li> </ul>	0	Q4		
Outcome 2.2. Determination of 2 coastal protected areas by the local government in the form of DPL and/or KEE (Essential Mangrove Ecosystem Area)	<ul> <li>New protected areas on the coast set in 2 districts</li> <li>2 Regional regulations regarding DPL/KEE are discussed and stipulated by the Regional government and the DPR</li> <li>The community is aware of the existence of a New Protected Area in the Makassar Strait and Tomini Bay</li> </ul>	0	Q5-Q6	- Map of DPL/KEE in 2 districts - Local Regulation on Determination of DPL/KEE in Parigi Moutong Regency and Donggala Regency	There are no political obstacles from the local government (Pemda and DPRD) in determining the new protected area
Output 2.2.1. Identification and Zoning of Marine Protected Areas (DPL) and/or KEE around the Makassar Strait Coast and Tomini Bay	<ul> <li>There are a number of indicative areas that will be proposed to local governments to be designated as new protected areas</li> <li>Indicative areas were widely consulted, and agreed to be processed for determination</li> </ul>			- Indicative map of MPA/KEE	
Output 2.2.1. Determination of Marine Protected Areas (DPL) and/or KEE around the Makassar Strait Coast and Tomini Bay					
Outcome 2.3. Critical land rehabilitation in Social Forestry, Mangrove and Coral reef areas	<ul> <li>10 Ha out of a total area of 405 hectares of damaged coral in rehabilitation</li> <li>13 Coastal villages and small islands practice bioreeftek method of reef</li> </ul>				

	cultivation				
	<ul> <li>130 hectares of mangrove</li> </ul>				
	ecosystem for rehabilitation.				
	- 250 people are involved to plant				
	mangroves.				
	- 13 women's groups carry out				
	mangrove rehabilitation				
	- 13 groups were able to monitor and				
	evaluate the progress of coral				
	restoration and rehabilitation of				
	mangrove ecosystems.				
Output 2.3.1.					
Rehabilitation of critical land in the PS					
working area with MPTS (Multi					
Purposes Tree Species)					
Output 2.3.2	130 Ha of mangroves in 13 villages, in				
Female <i>Lead</i> on Mangrove	Donggala and Parigi Moutong				
Rehabilitation	rehabilitated, by women				
Output 2.3.3.	10 Ha of Coral Reef rehabilitated with				
Modeling of Coral Reef Rehabilitation	bio reeftech method				
Bio-reeftech Method, 10 Ha	bioreenteen method				
	onomic resilience through improving the l	ivelihoods of the poor wome	n and vulnerable groups	I	
Outcome 3.1.			n, and valierable groups		
The development of micro/small					
businesses that are adaptive					
innovation					
Output 3.1.1					
adaptation innovation effort					
Output 3.1.2					
Development of sectional					
agroforestry as an alternative to					
sustainable land use					
Output 3.1.3					
Increasing the income of small-scale					
demersal fishermen through the					
support of fisheries knowledge and					
information, fishing equipment and					
technology					
	licies and instruments to strengthen adap	tation actions and ensure pro	gram sustainability		
	<ul> <li>Establishment of API Working Groups</li> </ul>		Internalization of API		
		-			

Development of institutions and actions on Climate Change in Donggala and Parigi Moutong districts	<ul> <li>in 2 districts</li> <li>The composition of the management and members of the API POKJA across sectors and actors</li> <li>Decree of the Regent of Donggala and Parigi Moutong regarding the determination of the API POKJA</li> </ul>	issues started early in the program and became a concern after 6 months	
Output 4.1.1 The formation of the API POKJA in the districts of Donggala and Parigi Moutong Output 4.1.2	- Regent's Regulation on RAD API		
There is a Climate Change Adaptation Action Plan (RAD API) Document for Donggala and Parigi Moutong Regencies.	<ul> <li>Integration of Adaptation Actions in RKPD</li> <li>Sustainable adaptation funding commitments from the Donggala and Parigi Moutong district governments</li> </ul>		
Output 4.1.3. Promotion of climate change adaptation actions.			

## Annex 4. Budget Plan

Description of Ite	em	Cost in IDR	Cost in US\$
	TOTAL ACTIVITIES AND PERSONNEL COST AND OPERASTIONAL COST	12.893.246.500	920.946
	Total Activities	11.668.388.500	833.456
Component I: St	rengthening the adaptation capacity of village-based communities, through the realization of ProKlim villages	2.366.750.000	169.054
Outcome 1	Establishment of 24 new ProKlim Villages	1.457.900.000	104.136
Output 1.1.1.	Dissemination of program information, preparation and acceptance of programs and providing Enable conditions for program success	366.650.000	26.189
	1. Launching of the program at the provincial level by the Governor in Palu	36.600.000	2.614
Activity	2. Program socialization at village level	30.050.000	2.146
Activity	3. Mapping of program beneficiaries and building a complaint mechanism	150.000.000	10.714
	4. GEDSI Training for all Program Implementers	150.000.000	10.714
Output 1.1.2.	The issuance of village policies related to climate change adaptation plans and the ProKlim group.	580.950.000	41.496
	1. Discussion Problem identification	64.550.000	4.611
	2. Training on making village regulations	64.550.000	4.611
	3. Preparation of Ranperdes on Proklim	64.550.000	4.611
	4. Public consultation on Ranperdes	64.550.000	4.611
Activity	5. Invitation of Ranperdes on pro-climate	64.550.000	4.611
	6. Facilitating the establishment of pro-climate working groups.	64.550.000	4.611
	7. Deliberation on election of pro-climate group management	64.550.000	4.611
	8. FGD on the preparation of the pro-climate group work plan.	64.550.000	4.611
	9. Facilitating the inauguration of pro-climate group management by the village head	64.550.000	4.611
Output 1.1.3	Propose 24 ProKlim Villages to the Director General of PPI	510.300.000	36.450
	1. Communication and coordination with BPPI Sulawesi.	64.550.000	4.611
Activity	2. Assistance in preparing and pro-climate village proposals	300.000.000	21.429
Activity	3. Propose 24 ProKlim Villages through the national registration system for climate change control	64.550.000	4.611
	4. Correspondence and proposal escort	81.200.000	5.800
Outcome 2	Increase access and availability of knowledge and information on climate change	908.850.000	64.918
Output 1.1.4.	Increased knowledge of adaptation, as well as circulation of climate information	908.850.000	64.918
	1. Development of Climate Schools in 24 villages	715.200.000	51.086
	2. Intensive course on aerial and underwater drone operation for Millennials	64.550.000	4.611

	3. Millennials conduct periodic forest and coastal health monitoring	64.550.000	4.611
	4. Updates Periodic reports on cover changes and infographic displays on forest and coral reef health in 24 villages	64.550.000	4.611
Component II: In new protected a	nprovement of ecosystems through strengthening social forestry, rehabilitating degraded lands, and establishing	4.565.865.500	326.133
Outcome 3	Strengthening community access through social forestry and Expansion of terrestrial protected areas/zones in the neck ecoregion	710.202.500	50.729
Output 2.1.1.	Revitalization of the Social Forestry Permit Holder Group and the social forestry licensing process	250.950.000	17.925
	1. Workshop on Social Forestry Revitalization in 6 permit holders and 2 prospective permit holders	94.200.000	6.729
	2. Facilitating the acceleration of issuance of permits for 2 new social forestry areas	64.550.000	4.611
Activity	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	46.100.000	3.293
	4. Arrangement of Social Forestry block area in 6 existing social forestry	46.100.000	3.293
Output 2.1.2.	New Protected Area Zoning	459.252.500	32.804
	1. Participatory field tracking of new protection zones within the Social Forestry area and Outside the Social Forestry area	64.550.000	4.611
	2. Workshop on integration of utilization blocks, land use plans with detailed village spatial plans	44.550.000	3.182
	3. New protection zone delineation	44.550.000	3.182
Activity	4. Workshop on establishing and affirming new protected zones.	44.550.000	3.182
	5. Arrangement of block boundaries/protection zones in social forestry areas and local protected areas	36.100.000	2.579
	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	224.952.500	16.068
Outcome 4	Determination of 2 coastal protected areas by local governments in the form of DPL and/or KEE (Essential Mangrove Ecosystem Areas)	294.450.000	21.032
Output 2.2.1.	Determination of Zoning Map of Marine Protected Areas (DPL) and/or KEE around the Makassar Strait Coast and Tomini Bay	294.450.000	21.032
	1. Field tracking of potential areas Zoning Map of Marine Protected Areas (DPL) and/or KEE around the Makassar Strait Coast and Tomini Bay	36.100.000	2.579
	2. Zoning of Marine Protected Areas (DPL) and/or KEE around the Makassar Strait Coast and Tomini Bay	36.100.000	2.579
Activity	3. Preparation of academic studies of Marine Protected Areas (DPL) and/or KEE around the Makassar Strait Coast and Tomini Bay	59.900.000	4.279
	4. Preparation of Draft Regional Regulation on Marine Protected Areas (DPL) and/or KEE around the Makassar Strait Coast and Tomini Bay	61.900.000	4.421
	5. 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	55.900.000	3.993
	6. Communication and lobbying to include the draft Ranperda in the Propemperda (Program Formation of Regional	44.550.000	3.182

	Regulations)		
Outcome 5	Rehabilitasi lahan Kritis di areal Perhutanan social, Mangrove dan terumbu Karang	3.561.213.000	254.372
Output2.3.1.	Rehabilitation of critical land in the PS working area with MPTS (Multi Purposes Tree Species)	2.273.300.000	162.379
	1. MPTS nursery training for the ProKlim Group	349.200.000	24.943
	2. Village nursery development in 11 villages	405.450.000	28.961
Activity	3. Nursery of 110,000 MPTS seedlings at the Village Nursery	955.450.000	68.246
	4. Planting 110.00 seedlings in critical areas using the successful agroforestry method	563.200.000	40.229
Output 2.3.2.	Women Lead on Mangrove Rehabilitation	689.650.000	49.261
	1. Field School of Mangrove Seedling and Cultivation Techniques for women in 13 villages	151.450.000	10.818
A _ 41: - : 4: -	2. Mangrove Nurseries by women in 13 villages	392.600.000	28.043
Activity	3. Mangrove planting by women in 13 villages x 10 Ha (130 ha)	119.600.000	8.543
	4. Monitoring and maintenance of mangroves by women in 13 villages	26.000.000	1.857
Output 2.3.3.	Modeling of Coral Reef Rehabilitation Bio-reeftech Method, 10 Ha	598.263.000	42.733
	1. Field School for making and cultivating corals Bioreeftek Method for young fishermen	67.398.000	4.814
A _ 41: - : 4: -	2. Facilitate the manufacture of bioreeftech media	425.400.000	30.386
Activity	3. Placement of bioreeftech media on coasts and coral reefs that need to be restored.	70.245.000	5.018
	4. Facilitate monitoring and reporting on coral reef development	35.220.000	2.516
Component III: In groups	mproving social and economic resilience through improving the livelihoods of the poor, women, and vulnerable	3.733.205.000	266.658
Outcome 6	The development of micro/small businesses that are adaptive innovation	3.733.205.000	266.658
Output 3.1.1	The existence of an adaptation innovation effort	1.071.250.000	76.518
	1. Training and assessment of sustainable livelihood assets	88.250.000	6.304
Activity	2. Business development studies, investment plans and marketing of climate adaptation innovation products	351.600.000	25.114
<b>,</b>	3. Workshop on business development plans, investment plans and marketing plans for climate adaptation innovation products	631.400.000	45.100
Output 3.1.2	Development of sectional agroforestry based cocoa as an alternative to sustainable land use	1.013.128.000	72.366
Activity	1. Sectional agroforestry system training	385.800.000	27.557
Activity	2. Support for successional agroforestry development	627.328.000	44.809
Output 3.1.3	Increasing the income of small-scale demersal fishermen through the support of fisheries knowledge and information, fishing equipment and technology	1.648.827.000	117.773
Activity	1. There is a small-scale demersal fishery profile document	237.575.000	16.970
Activity	2. Assistance with fishing gear for small-scale demersal fishermen	365.100.000	26.079

	3. Provision of fishfinder technology for fishermen	162.500.000	11.607
	4. Karamba/mangrove crab aquaculture training	443.652.000	31.689
	5. Support for the implementation of aquaculture	440.000.000	31.429
Component IV: I	Provision of regional policies and instruments to strengthen adaptation actions and ensure program sustainability	1.002.568.000	71.612
Outcome 7.	Development of Climate Change institutions and actions in Donggala and Parigi Moutong districts	1.002.568.000	71.612
Output 4.1.1	The formation of the API POKJA in the districts of Donggala and Parigi Moutong	331.840.000	23.703
	1. Climate change FGD and per OPD	122.880.000	8.777
	2. Team formation Initiator of API POKJA formation	122.880.000	8.777
Activity	3. Facilitate the preparation of the statutes of the API POKJA	20.480.000	1.463
-	4. Workshop on Formation of POKJA API in 2 districts	32.800.000	2.343
	5. Facilitating the Issuance of a Regent's Decree on the API POKJA in Donggala and Parigi Moutong districts	32.800.000	2.343
Output 4.1.2	There is a Climate Change Adaptation Action Plan (RAD API) Document for Donggala and Parigi Moutong Districts.	430.170.000	30.726
	1. Formation of Expert Panel	122.880.000	8.777
	2. Document Preparation Desk by Expert Panel and API POKJA	229.500.000	16.393
Activity	3. RAD API Document Design Consultation	10.240.000	731
	4. Regional Seminar on RAD API in Donggala and Parigi Moutong districts	34.750.000	2.482
	5. Approval of RAD API Documents through Perbub	32.800.000	2.343
Output 4.1.3.	Promotion of climate change adaptation actions.	240.558.000	17.183
	1. Social media campaigns on adaptation initiatives and actions	120.300.000	8.593
A . 11 14	2. Media Gathering	58.300.000	4.164
Activity	3. Adaptation action festival	61.958.000	4.426
	PERSONNEL COST AND OPERASTIONAL COST	1.224.858.000	87.490
	Salary	1.067.208.000	76.229
	Program Manager	216.000.000	15.429
	Program officer	336.000.000	24.000
	livelihood Management specialist		
	Monev specialist		
	Finance Manager	180.000.000	12.857
	Finance Officer	251.208.000	17.943
	Office boy	84.000.000	6.000
	Field Officer		

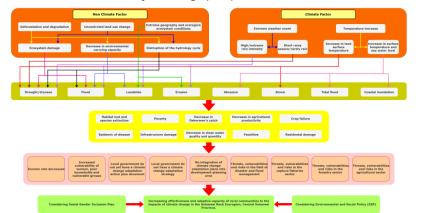
OPERATIONAL & OVERHEAD COST	157.650.00	0 11.261
Project Operational		
Stationeries	12.450.00	0 889
Office communication (Pulsa HP)	19.200.00	0 1.371
Water & electricity	12.000.00	0 857
Audit Program	70.000.00	0 5.000
Project Procurement		
Pengadan Laptop	40.000.00	0 2.857
Alat Perekam suara	4.000.00	0 286

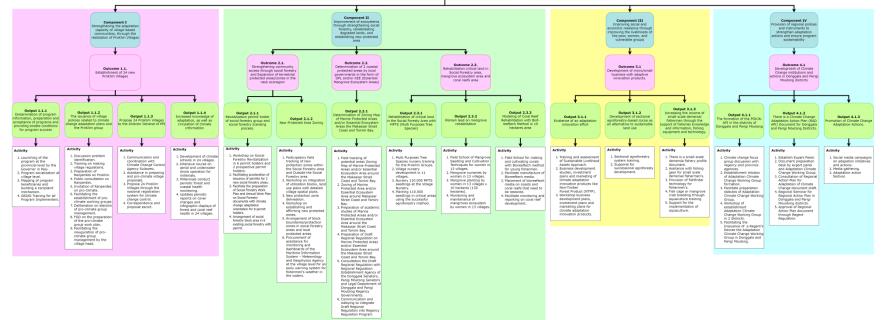
## Annex 5. Table of Beneficiaries

Distrik	Cubdicturet	Villages	T	otal Populati	on
DISTRIK	Subdistrict	Villages	Men	Women	Total
Donggala	Balaesang Tanjung	Palau	609	562	1171
		Pomolulu	962	922	1884
		Rano	790	808	1598
		Manimbaya	628	536	1164
	Labuan	Labuan	1393	1413	2806
	Sindue	Kumbasa	414	392	806
	Sindue Tombusabora	Saloya	1102	1013	2115
	Sirenja	Ujumbou	989	998	1987
	Sojol	Bou	1333	1242	2575
	Sojol Utara	Bengkoli	287	266	553
Parigi Moutong	Palasa	Bambasiang	583	534	1117
		Pebounang	1279	1196	2475
		Dongkalan	1007	825	1832
		Ogoansam	580	517	1097
		Bobalo	1310	1190	2500
	Tinombo	Dusunan	599	564	1163
		Lombok Barat	1087	1013	2100
		Lombok	963	938	1901
		Taipaobal	309	262	571
		Ogoalas	1078	978	2056
		Dusunan Barat	576	566	1142
		Patingke	516	465	981
	Tinombo Selatan	Sigega Bersehati	1013	905	1918
	Tomini	Tomini Utara	804	761	1565
TOTAL	12	24	20.211	18.866	39.077

Annex 6. Teory of Change

Theory of Change (TOC) Consortium KUAT





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 important than men's	<ul> <li>Conduct gender analysis in capture fisheries business (demersal and pelagic)</li> </ul>	<ul> <li>Documents resulting from studies that can provide an understanding of gender relations in the fishing</li> </ul>	<ul> <li>Included in output</li> <li>1.1.1. activities 3 and 4</li> <li>Included in output</li> </ul>	Q 1
(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.	<ul> <li>Develop an operational plan for gender mainstreaming</li> <li>Identify and recruit female cadres</li> <li>Develop a plan to increase the capacity of women cadres</li> <li>conducting a room for discussion on gender to understand the gender dynamics among the locals</li> </ul>	<ul> <li>community</li> <li>Policies and operational measures to promote gender equality</li> <li>Orienting toward good adaptation based on local gender dinamics</li> </ul>	2.3.2. activities 1,2,3 and 4	Q 5 – Q 7
Climate change causes extreme weather events and climate variability in the Tomini Bay and Makassar Straits.	<ul> <li>Introduction of sustainable coastal aquaculture technology</li> <li>Develop aquaculture business</li> </ul>	<ul> <li>There are new aquaculture technology/techniques that can be practiced by women's groups.</li> </ul>	<ul> <li>Include in output 3.1.3, activity 4 and 5</li> <li>Include in output 3.1.1.,</li> </ul>	Q 2 – Q 3
Weather conditions 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 land, namely to businesses or places of business that are the domain of women fishermen, namely, the coast.	<ul> <li>Supporting fishery product processing business to increase added value;</li> </ul>	<ul> <li>The development of sustainable aquaculture business, which is integrated with coastal conservation</li> <li>Diversification of fishery products</li> <li>There is or increased production of processed fishery products</li> </ul>	activity 1,2 & 3.	Q 2 – Q 3
Women, especially heads of household, are the main beneficiaries of damage to	Restoration of Mangrove and Coral Reef ecosystems as a support for livelihood	<ul> <li>Rehabilitation and restoration of 130 hectares of mangrove</li> </ul>	<ul> <li>Include in output 2.3.2., activity 3 and 4</li> </ul>	Q 5 – Q 7
coastal ecosystems (mangroves and coral reefs), because this area is the domain of women.	systems, as well as part of the production chain for small fishermen, women and female heads of household	ecosystem in 13 villages - Rehabilitation of damaged coral reefs 10 Ha - Determination of coastal	<ul> <li>Include in output 2.3.3., activity 3 dan 4</li> <li>Include in output 2.2.1. activity 3,4,5,6</li> </ul>	Q 5 – Q 7

		protection areas in the form of Marine Protected Areas/Essential Ecosystem Areas (DPL/KEE)		Q 6 – Q 8
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.	<ul> <li>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</li> <li>Encouraging the birth of Village Regulations on Participation and Sustainable Land Use Planing (PaSLUP) which are participatory and based on Traditional Wisdom</li> </ul>	<ul> <li>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</li> <li>The existence of a Village Regulation on sustainable land use planning</li> </ul>	<ul> <li>Include in output 1.1.3 activity 2.</li> <li>Include in output 1.1.2. activity 2,3,4,5 dan 6</li> </ul>	Q 1 – Q 2 Q 1 – Q 2
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	<ul> <li>Provide a Gender Inclusion Plan (SGIP) policy</li> <li>Provisions for the mandatory involvement of at least 30% of women in various organizational/group management structures, in meetings, training, delegation, etc.</li> <li>Encouraging the birth of women's leadership</li> <li>Establishment of a gender-based Climate School in each program target area</li> </ul>	<ul> <li>There is a comprehensive planning related to gender and social inclusion that becomes the guideline for gender mainstreaming in the program</li> <li>Women's participation increases, and has an impact on increasing women's capacity</li> <li>Women's access and control in decision making</li> <li>The emergence of a number of cadres of female leaders who are pioneers of adaptation actions</li> </ul>	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
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 in Villages	Include in output 1.1.4. activity 1,2,3 dan 4	Q 2