



ADAPTATION FUND

REQUEST FOR PROJECT/PROGRAMME FUNDING FROM THE ADAPTATION FUND

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

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

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

Complete documentation should be sent to:

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ADAPTATION FUND

PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT/PROGRAMME INFORMATION

Project/Programme Category:	Small-sized Project/Programme
Country/ies:	Indonesia
Title of Project/Programme:	“Adapting to Climate Change through Sustainable Integrated Watershed Governance in Indigenous People of Ammatoa Kajang Customary Area in Bulukumba Regency, South Sulawesi Province, Indonesia”
Type of Implementing Entity:	National Implementing Entity (NIE)
Implementing Entity:	Kemitraan: Partnerships for Governance Reform in Indonesia
Executing Entity/ies:	PERKUMPULAN PAYO PAYO; OASE (An Organization on Social and Environmental issues)
Amount of Financing Requested:	US \$ 1,125,015,16- , (in U.S Dollars Equivalent)

Project / Programme Background and Context:

Climate context of Indonesia

As an archipelago lies between Asia and Australia continents, Indonesia is very prone to climate change impact. As the current studies show that the surface temperature tends to raise 1°C in 20 Century. Some studies of several organizations in Indonesia found that climate change affected ecological damage and livelihood of the poor people.

As part of Southeast Asia, Indonesia has featured a complex range of terrains and land-sea contrast. Across this region, temperature has been increasing at rate of 0.14°C to 0.20°C per decade since the 1960s coupled with a rising number of hot days and warm nights, and a decline in cooler weather (IPCC, 2014).

Several large-scale phenomena influence the climate of this region. The impact of Madden-Julian Oscillation (MJO) have been no obvious trends in extreme rainfall indices in Indonesia, except evidence of a decrease in some areas in annual rainfall and an increase in the ratio of the wet to dry season rainfall (Aldrian and Djamil, IPCC, 2014). The impact of Indian Ocean Dipole pattern is associated with droughts in Indonesia. It is more prominent in eastern Indonesia. In the equatorial Indian Ocean, coral isotropic records off Indonesia indicate a reduced Sea Surface Temperature (SST) warming and salinity during the 20th century (Abram et al, IPCC 2014).

An expert, Sofian (2011) explained that rate of sea level rise since mid 19 centuries is bigger, compared with rate since two millenniums before. Since period 1901-2010, rate of sea level rise

reached 0,19 meter. Rate of sea level rise is twice more rapidly on period 1993-2010 than period of 1901-2010. Based on this scenario, the highest sea level rise is located in east Indonesia, include Sulawesi with rate 5-8 mm per year.

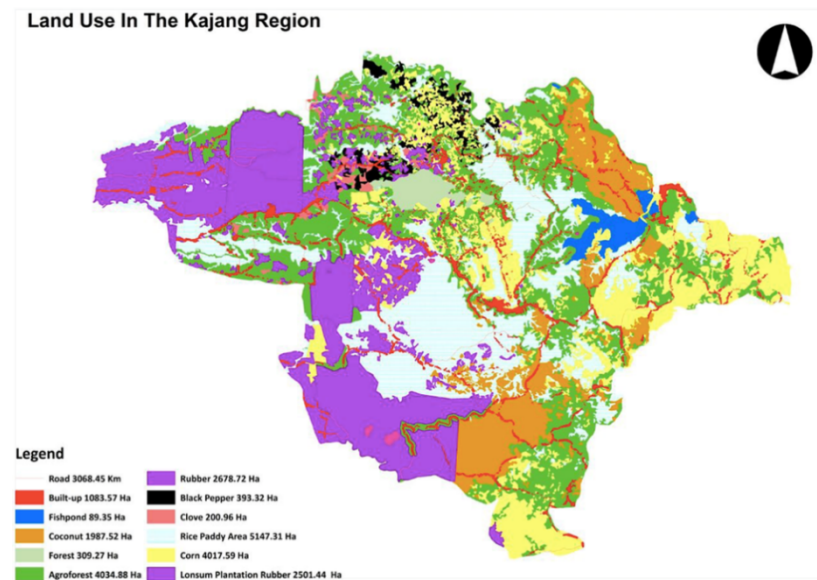
Global climate change estimated will be affecting coastal community in various part of the world. One thing that will be changed are acceleration to sea level rise which will have an impact such as drown of small islands, increased flooding, coastal erosion, sea water intrusion and changes in ecological processes in coastal areas. Changes in these biological aspects will also have an impact on socio-economic aspects of coastal communities such as loss of infrastructure, decline in ecological values, and the economic value of coastal resources (Klein & Nicholls, 1999).

Socio economic development also influences the capacity to adapt. Poor people in urban informal and rural areas settlements, of which there are about 1 billion worldwide, are particularly vulnerable to weather and climate impacts. The top five nation classified by population in coastal low-lying areas are developing and newly industrialized countries; Bangladesh, China, Vietnam, India, and Indonesia (McGranahan et al., 2007; Bollman et al., 2010; Jongman et al., 2012).

Indonesia as an archipelago has 18.306 total islands with the coastal line reached 95.181 km. The inhabitants of Indonesia who live in this area are 60% from the total population, or about 160 million people. The economic development and activities are relied on with the coastal resources on this area. Most of Indonesian who lives in the coastal area dependence to the marine natural resources for their main income, as well as South Sulawesi Province.

Climate Related Disaster Risk in Indonesia & Ammatoa Kajang Indigenous People Customary Area

Indonesia, as the largest archipelagic country in the world, is one of the most vulnerable country to the effects of climate change. According to data compiled in the Indonesian Disaster Information Data (DIBI) -National Disaster Bureau (BNPB), it can be seen that out of 1,800 disaster events in the period 2005 to 2015 more than 78% (11,648) of disaster events related to hydro meteorology and 22% (3,810) were geological disasters . The hydrometeorological disaster events consist of floods, extreme waves, land and forest fires, droughts, and extreme weather. While for the geological disaster groups that often occur are earthquakes, tsunamis, volcanic eruptions, and landslides. The overall number has increased steadily. Even for the geological related disaster the people of Indonesia still vulnerable due to less capacity and resilience toward the disaster risks.



Adding to the phenomenon of extreme climate events in its frequency and intensity cannot be separated from climate change which contributes to increasing the complexity of hydrometeorology. Furthermore, with a high frequency of the occurrence, this disaster group also has a huge impact on the economic and environmental. This condition decreases the productivity of agricultural land which is the economic foundation of the agricultural community in Indonesia.

Based on the 2016 Indonesia Disaster Risk Book data, the risk exposure of South Sulawesi province is classified as vulnerable to the impacts of climate change and disaster risk. Based on the disaster risk assessment compiled by BNPB in 2015, it is seen that the number of people exposed to disaster risk spread in South Sulawesi with approximately 8.5 million people, which caused an economic loss of 15.5 billion.

Related to climate change, a trend of a significant decrease in rainfall in almost all parts of Indonesia in June, July and August, and increased opportunities for daily extreme rainfall in all parts of Indonesia in the period 1998-2008 (Bappenas, 2013). This event increases the potential for erosion, reduces wetlands along the coast, increases the rate of sea water intrusion, decreases food production. Indonesia is ranked as the ninth of the 10 most vulnerable countries to food security due to the impact of climate change, especially in the fisheries sector (Huelsenk, Oceana, 2012 in DNPI, 2013).

Various research results indicate that the occurrence of climate change will cause the beginning of the rainy season to experience a setback while the end of the rainy season will be faster, which means the length of the rainy season will be shorter. On the other hand, rainy season rainfall will tend to increase while dry season rainfall tends to decrease. The change in rainfall distribution causes various potential natural disasters triggered by higher rainfall, such as floods, landslides, river overflows, and spread of disease vectors. Whereas in a reduced rainfall condition potential disaster can occur such as drought, crop failure, lack of clean water, and various social problems that may arise.

Socio Economic Development

The main income from Bulukumba's Gross Regional Domestic Product (GRDP) relies on agriculture and plantation. The ocean and fisheries sector also become source of its GRDP. Meanwhile the economic activities of those coastal sub-districts area dominated in fishery catching, Aquaculture (fishpond) and seaweed farming.

Central Statistics Agency of Bulukumba data shows that total population of the district in 2016 is 410.485 people; including 194.013 men and 216.472 women. The increasing of female population is influenced by the number of males who go work outside the region due to poverty. Data from Integrated Data Base for Social Protection Program" (TNP2K-Bappeda Bulukumba, 2015) shows that Bulukumba has 35.545 poor households or about 127.516 poor people. The female households are 10.452 heads in Bulukumba. The daily activities of woman limited to preparing their husband's needs (for those husbands who stay at Bulukumba), not involve in development decision making within their villages.

Climate Change Adaptation Regulation and Institutional Context

The United Nations Climate Change Framework Convention (UNFCCC) is an international environmental agreement negotiated at the Earth Summit in Rio de Janeiro on 3 - 14 June 1992 involving 108 heads of state and government. The convention aims to stabilize the concentration of greenhouse gases in the atmosphere to a level that is able to prevent human interference with the climate system. This Convention has wide legitimacy because its membership is almost universal.

As a form of Indonesia's participation in actively taking part together with other members of the international community in an effort to prevent increasing concentrations of greenhouse gases in the atmosphere, the Government of Indonesia has signed the United Nations Framework Convention on Climate Change in Rio de Janeiro, Brazil, on June 5, 1992 which was confirmed through Law 6/1994 concerning Ratification of the UNFCCC.

The results of the UNFCCC Convention also became the forerunner of the Conference of Parties (COP) meeting held every year since 1995. Some of the important international agreements that were produced were the Kyoto Protocol in 1997 in Japan which obliged developed countries to reduce greenhouse gas emissions. Until 2004, the Indonesian government reiterated its involvement in the issue of climate change through ratification of Law No. 17 of 2004 concerning the ratification of the Kyoto Protocol to the United Nations Framework Convention on Climate Change.

Indonesia is a tropical country that has the second largest forest in the world so that it has an important role in influencing the Earth's climate due to an increase in the concentration of greenhouse gases in the atmosphere which cause adverse effects on the environment and human life. In 2007 Indonesia hosted the 13th COP and produced the Bali Action Plan. One agreed set of documents is the Bali Roadmap that binds signatory countries to reach new agreement in 2009.

The accumulated peak of various decisions on REDD + in Indonesia continued until 2009 where President Susilo Bambang Yudhoyono announced the first voluntary commitment by developing countries to reducing greenhouse gas emissions at the G20 Summit which was confirmed through the ratification of Law 31/2009 on Meteorology, Climatology and Geophysics and Law 32/2009 on Environmental Protection and Management.

The follow-up rules and derivatives adopted by the Indonesian government in response to climate change include: Presidential Decree Number 19 of 2010 concerning the Preparatory for the Formation of Task Force of ReDD + Institutions and then reaffirmed through Presidential Decree No. 25 of 2011 concerning the ReDD + Institutional Preparation of Task Force, then amended became Presidential Decree No. 5 of 2013 concerning changes to the Presidential Decree No. 25 of 2011 concerning the Task Force for Preparation of Institutions Reducing Emissions from Deforestation and Forest Degradation (ReDD +), Presidential Regulation No. 61/2011 concerning National Action Plans for Reducing Greenhouse Gas Emissions (RAN GRK)), Presidential Regulation Number 71 of 2011 concerning Implementation of National Greenhouse Gas Inventory, Regulation of the Minister of Forestry of the Republic of Indonesia Number: P. 20 / Menhut-II / 2012 concerning Forest Carbon Implementation, PerMenLHK 33/2016 concerning Guidelines for Preparing Action for Climate Change Adaptation, and Pe Government regulation Number 37 of 2012 concerning watershed management.

Indonesia is very responsive about integrated climate change issues into national development plan. For that, Indonesia has established some regulations as follows; National Adaptation Action Plan on Climate Change (RAN-API) by National Development Planning Agency in 2012. RAN-API is an important input into the development of the Government Annual Plan as well as the National Medium-Term Development Plan for 2015-2019 (RPJMN) to be more responsive of climate change effects.

Other regulation is the Ministry of Environment and Forestry Regulation Number 33/2016 on Guidelines for the Preparation of Climate Change Adaptation Action. The regulation aims to provide guidelines for local governments and related stakeholders in preparing climate change adaptation actions and to integrate them into local development plan and/or specific sectors, as mentioned in the Article 3, section 1: about coastal and small island (point f), and in the Article 4: about steps for making adaptation action plan, among others: (a) Identification of target areas and/or specific sectors, and issues about climate change impact; (b) Arrange the vulnerability and climate risk assessment; (c) Arrange the options of adaptation action on climate change; (d) Priority setting adaptation action on climate change; (e) Integrate the climate change adaptation action into policies, plans, and/or development program.

Government of Bulukumba has adopting the Climate Change Adaptation Action into Mid Term Regional Development Plan. Several important missions as follows; Land-use planning, environmental and natural resources preservation, culture and disaster risk reduction. There are two strategies; (1) strengthened cooperation among local government and institutions related to disaster risk reduction, and (2) increasing facilities and infrastructure to support disaster preparedness.

There are some activities to support this mission, which are; (1) rehabilitation of source of a fresh-water and rehabilitation of border river; (2) establish the five community groups to manage the Climate Village named 'Kampung Iklim'; (3) rehabilitation of five coastal areas with mangrove, coral reef rehabilitations and transplantation, and make one fish-breeding center; (4) provide for a potential disaster database of ten sub-districts in Bulukumba to increase awareness of disaster control efforts.

To support this mission, several agencies have sectoral strategic plan. Environmental Agency focus on strategic plan such as; (1) Rehabilitation of source of a fresh-water and rehabilitation of border river; (2) Establish the five community groups to manage the Climate Village named 'Kampung Iklim'; (3) Rehabilitation of five coastal areas with mangrove, coral reef rehabilitations and transplantation, and make one fish-breeding center. For Climate Village program, government of Bulukumba by Environmental Agency actively socialize this program entire Bulukumba regency. This campaign

started in Salassae Village that get appreciation from central government in 2017. This event also declared 'Climate Village Forum', as a place to communicate and coordinate in environmental sector, especially to face impact of climate change by adaptation and mitigation actions.

However, those efforts are to be seen still partial, not integrated and have not seen the watershed as the integrated landscape, therefore need integrated approach to govern and manage it.

Government of Bulukumba also established Disaster Regional Management Agency (BPBD). This agency also has strategic plan that is provide for a potential disaster database of ten sub-districts in Bulukumba to increase awareness of disaster control efforts. This agency can provide data from community level and regional level and coordinate to apply disaster risk mitigation by communities.

At the community level, with the Law No. 6/2014 about Village Regulation. The wide opportunity for sustainability funding and actions are provided if the climate change adaptation is integrated into village development planning. It is mean they can take realistic actions by themselves and for themselves.

The importance of Ammatoa Kajang Customary Area and the DAS

A watershed is a land area which is an integral part of the river and its tributaries, which functions to accommodate, store and flow water that comes from rainfall to lakes or to the sea naturally, the boundary on land is a divider topographical and boundary in the sea to the waters that are still affected by land activities (PP #37 2012). In the Watershed there are two areas, namely the water source area (upstream area) and the water receptor area (downstream area). The two area are interconnected and influence within the watershed ecosystem unit (DAS). Land use change activities carried out in the upstream watershed (DAS) not only have an impact in the area where the activity takes place (upstream DAS), but will also have an impact in the downstream areas in the form of changes in discharge and sediment transport fluctuations and dissolved material in water flow system.

The Kajang customary forest covering an area of 313.99 hectares (which the management of the forest has been handed over by the government based on SK 6746/Menlhk-pskl/kum.1/12/2016) is the meeting point of three watersheds namely the Raowa, Baonto and Apparang Watersheds. The customary forest area in the Raowa watershed is 79.24 ha, Apparang watershed 229.01 Ha, and Baonto watershed is 5.74 Ha. Kajang Customary Forest that is at an altitude between 183.75 -251 above sea level has a function as a conservation area for the agricultural and for clean water need for people living around the 3 watersheds.

Climate change impact in Indigenous People of Ammatoa Kajang area

The Indigenous People of Ammatoa Kajang customary area covering 22,592.87 hectares lies at 4 (four) sub-districts, covering 36 villages, with a population of 48,411 people (BPS Bulukumba, 2016). The area consists of three watershed landscape, namely: Baonto, Apparang, and Raowa Watershed. Due to climate change impact, the area experiencing problems in the form of:

- Flood
- Water crisis / drought
- Sea water intrusion
- Landslide

The downstream area began to show seawater intrusion, water shortages/drought and floods, while in the upstream area there were landslides in several places. This condition becomes important to understand as a part that shows the potential and central role of the three watersheds as ecosystem buffers in the Ammatoa Kajang customary region that require attention in relation to climate change resilience.

In general, the area of customary land is dominated by rice fields covering an area of 5,144.31 Ha and 4,034.88 Ha are agroforestry complex: clove, cocoa, pepper and other. While the rest are corn, rubber plantation and residential area.

However, in its management there are still various obstacles. First, the role of Ammatoa Kajang customary forest covering an area of only 313.99 Ha. Its central function supporting ecosystem in three watersheds is not functioning effectively to meet ecosystem needs in 3 watersheds (Baonto watershed and Apparang watershed and Raowa watershed).

Secondly, increasing environmental degradation due to destructive activities such as forest encroachment or land conversion in upstream of the customary territories, illegal logging, dry land farming practices in the hills, and widespread deforestation have resulted in a decrease in the hydrological function of watersheds from downstream to upstream. At the upstream, agricultural related livelihoods are threatened and at the downstream, water crisis or drought and sea water intrusion become sever problems.

Third, there is no yet Climate Change Adaptation Action Plans as derivatives of the National Action Plan of Climate Change Adaptation (RAN_API). This is due to the lack of initiation from stakeholders and authorities at the regional level to encourage synergy of development program planning at the district level related to the implementation of climate change adaptation.

Fourth, although the Village Law No. 6 of 2014 gives broad autonomy to the village government to manage its territory including budgeting for village development; the village government still put bigger portion of development and budget for road infrastructure and public facility buildings with less or none recognition to the climate change adaptation agenda. There has been no attempt by the village government to make a village plan that takes into account adaptive planning for climate change to solve the fundamental problems experienced by the people in the village.

Fifth, the Ammatoa Kajang customary area, especially in the Raowa watershed in the lowlands, is one of the factors causing flooding and seawater intrusion. There has been no maximum effort taken in overcoming this problem. Even though the water problem is an influential issue of the environment, socio-cultural life and the economic sustainability of Indigenous Peoples of Ammatoa Kajang. The soil and water conservation practices on lands surrounding customary forests has not been an important concern for all parties.

Tracing the results of the OASE research program with Balang Institute and CIFOR with a focus on the Raowa watershed area in 2015-2018. The impact of the five constraints mentioned above has resulted in floods, water shortages / drought, landslides and sea water intrusion in the Indigenous People of Ammatoa Kajang customary area. This impact will have a major influence on the economic sector, the socio-cultural and food needs of indigenous peoples of Ammatoa Kajang.

Flood

The rainy season that takes place in Kajang between December-May have been always causing flooding in certain locations, the Raowa river recently regularly overflow on roads, settlements and

rice fields. The overflow of river water that flooded the paddy fields caused damage to rice plants as the main food source of the Kajang indigenous people, bring economic loss to the people as the main source of the livelihood at the down-stream has been agriculture, especially rice.

Water crisis / drought

in the dry season, villages in the middle and downstream of the Raowa watershed experience a water crisis. This has an impact on meeting water needs for households and rice irrigation. Since 2012, in the village of Possi tana and Desa Lembanna have experienced the impact of the water crisis. Some tributaries and springs that were previously sources of water use have experienced drought. Government efforts to meet water needs for households in Lembanna Village have failed. According to residents, there are already three pipes that have piled up on the roadside between the axis of Lembanna Village - Sinjai Regency. However, this effort is still failing because the piped water source has experienced drought during the dry season. No water to be channeled. Facing this condition, the 236 families of Tama'dohong Hamlet in Lembanna Village dealt with it by buying water from mobile water vendors from villages bordering to customary forests. 236 family have to spend up to 5 million rupiah during the dry season. Another case is in Possi Tana Village, since the presence of the Community-Based Water and Sanitation Program (PAMSIMAS) in 2015 has held boreholes to respond to the water crisis in this village. The PAMSIMAS program have fulfilled household water needs and become a new policy for the village government to expand the program in the procurement of boreholes for rice irrigation. However, this program is doubt to be sustainable.

Sea water intrusion

At the downstream of The Ammatoa Kajang customary forests the sea water pushes into the Raowa river. The urge for sea water to the Raowa river has been three kilometers and has resulted in sea water intrusion along the way. Another thing that prolongs sea water intrusion is the project of dredging river for the needs of fish and shrimp ponds around the Raowa river.

Erosion

Landslides occur in slopes on land around the Ammatoa Kajang customary forest. This landslide usually occurs on the riverbanks when the intensity of rainfall increases in January or February. This landslide is caused by erosion by rain water on the soil which becomes saturated after the dry season. Rainwater erosion occurs in slopes of land in upstream areas on land that is used for maize crops. Rainwater erosion in the slope of farmers' land raises rocks as large as fist due to erosion and lack of tree vegetation. As a result, soil fertility decreases, plus the use of chemical fertilizers and pesticides by farmers accelerates the decline in soil health.

In sum, from abovementioned risks and hazards at the Ammatoa Kajang Indigenous People customary area the climate change impact have been affecting 22.592,87 Ha of Ammatoa Indigenous People customary area lies at 4 sub-districts, covering 36 villages and affecting 48.925 population of the area. With the lost estimated: from flooding Rp. 6,314,000,000 per year. From drought Rp. 64,016,000,000, from sea water intrusion Rp. 28,280,000,000. In total Rp. 98,610,000,000 per year.



Flooding (Dok. OASE Juni 2016)

Disaster Risk Assessment (BNPB, 2016)

Disasters Bulukumba Regency	Social (people)			Infrastructures (Indonesian Rupiah- IDR)			Economy (Indonesian Rupiah- IDR)			Environment (Hectare)		
	<i>low</i>	<i>medium</i>	<i>high</i>	<i>low</i>	<i>medium</i>	<i>high</i>	<i>low</i>	<i>medium</i>	<i>high</i>	<i>low</i>	<i>medium</i>	<i>high</i>
Earthquake	410.339	-	-	-	-	-	-	-	-	-	-	-
Tsunami	12.251	6.531	6.531	-	6.531	404.722	-	5.915	5.915	-	2	137
Landslide	2.607	17.110	17.110	-	66.366	33.123	-	33.123	33.123	-	44	3.544
Flood	197.623	75.469	75.469	-	-	75.469	-	155.678	155.678	-	30	13
Forest fire	-	-	-	-	-	-	-	1.117.027	43	-	1.311	943
Large Flood	2.606	8.899	11.700	-	26.067	61.049	-	17.564	68.531	-	3	48

Disaster cases in Bulukumba regency as cited above affected likely by climate change impacts. Meteorology Climatology and Geophysics Agency of Indonesia (BMKG) released weather

temperature maps in 2016 on normal condition (1981-2010) showed that in 2016 was the hottest year a long history. BMKG observed same with pronouncement of World Meteorology Organization (WMO) showed that in 2016 has rate temperature 1,2 °C (for South Sulawesi area reached 1.26 °C) is higher than normal (that is rate in 1981-2010). Moreover, anomaly of temperature in 2016 exceeded anomaly of temperature in 2015 that reached 1°C. As known that anomaly of weather temperature in 2015 affected by El-Nino phenomena caused long drought in Indonesia, while in 2016 there is no El-Nino, that condition indicate that greenhouse gas shows the effect on weather temperature.

It is also parallel with analysis of Indonesia BMKG (July, 2017) released analysis sea surface temperature (SST) in Bulukumba showed positive value that sea condition warmer and potentially evaporation process for making rain clouds around Bulukumba's area. One analysis method was Outgoing Longwave Radiation (OLR) showed negative values that signed clouds dense. Based on these analyses, showed that SST and OLR influential whirlwind disaster in Bulukumba.

PROBLEM AND ADAPTATION ACTION CONTEXT

No.	Problem Context	Project strategy	Adaptation Intervention Goal
1	Watershed Governance: The absence of an integrated watershed management plan that involves the parties has caused a decline in watershed ecological capacity to support community livelihood and environmental.	Formulating a collaborative watershed management plans by integrating the programs of the parties at the district and village level to improve watershed ecological capacity.	Strengthened the support capacity of the watershed in an effort to improve wellbeing, increase resilience, and improve adaptability to the impacts of climate change of Indigenous People of Kajang Ammatoa community.
2	Climate Change, Disaster Risk & Environment: Land use and land functions conversion in the upstream and downstream watershed causes land degradation and crop failure	Develop and Promote agroforestry systems & integrated adaptive agriculture system that are able to reduce the impact of disasters and climate change.	The support of the Kajang Ammatoa indigenous people in concrete actions to reduce the impact of land use conversion in the upper watershed area which will increase the resilience and adaptability of the Kajang Ammatoa Indigenous people to the impacts of climate change
3	The Livelihoods are not adaptive to climate change impact: Conversion of land use and functions in the upstream area caused flooding and drought which resulted in a water crisis and farmers' crop failure	Developing adaptive integrated agriculture system by utilizing productive land that is able to support soil and water conservation and reduce daily household expenses of the Kajang Indigenous community	Reducing pressure on the watershed area due to community activities, increasing people's adaptation to the effects of climate change through sustainable and adaptive livelihood strategies.
4	Policy: The absence of policies that governing and regulate the watershed	Formulation and put into regulation and socialization of the regulation concerning the	The support of regional government in an effort to encourage watershed management in an integrated, sustainable and adaptive to climate change in the district development

management and regional action plans related on climate change adaptation	integrated watershed management in participatory approach.	planning and development budgeting in Bulukumba Regency.
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LANDSCAPE AND VULNERABILITY STATUS OF THE PROGRAM LOCATION

a. Program Area

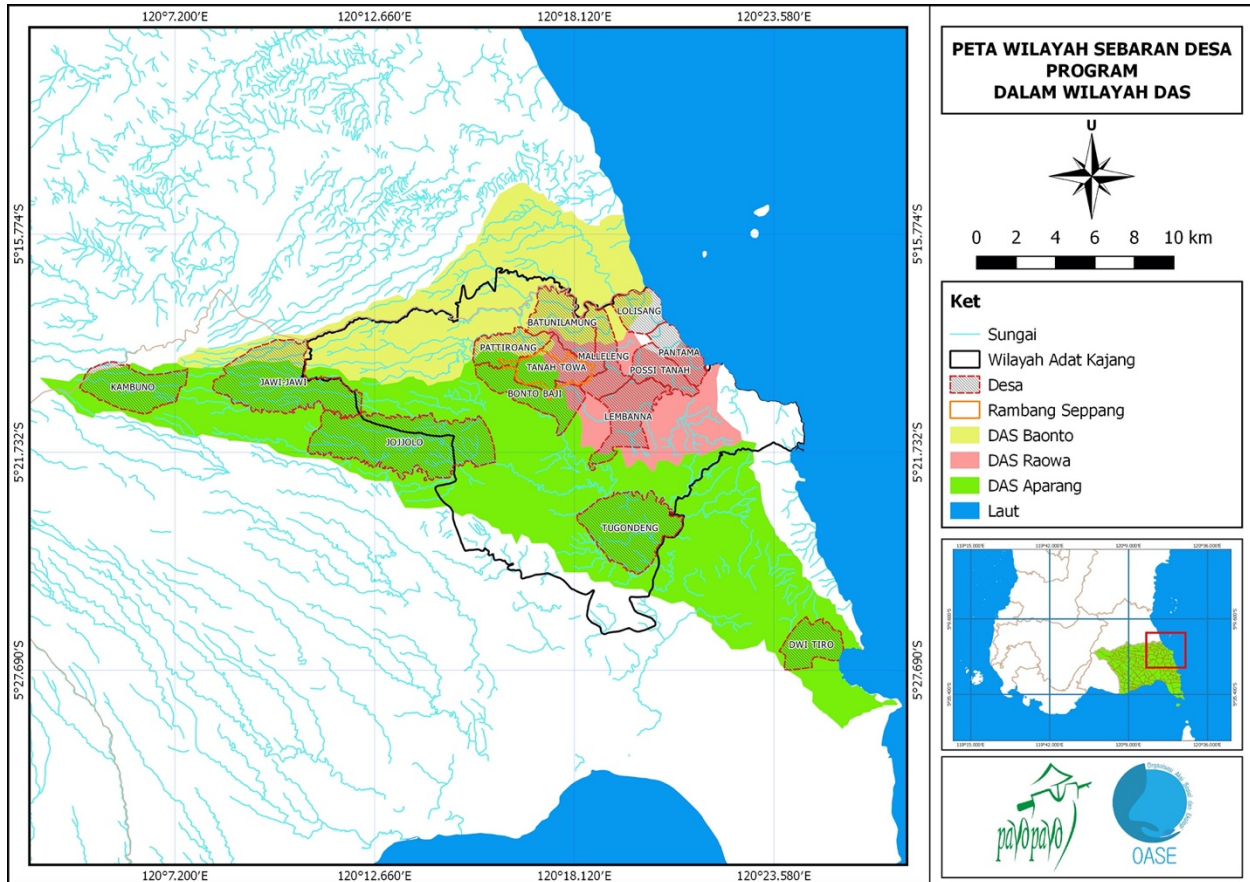
14 Villages of program location are chosen by considering the integrated (Source, Path and Receptor) aspects of 3 watershed areas in Indigenous People of Ammatoa Kajang Customary Area, Bulukumba District namely Raowa watershed (4,431 ha), Apparang watershed (23,594 ha) and Baonto watershed (9930 Ha). In general, the selection based on the watershed landscape approach; the Indigenous People Ammatoa Kajang Customary area, all the Raowa Watershed include in the customary area, partly the Apparang and Baonto watershed include in the customary area, and connected to the customary area as the upstream of the watershed. Some areas of the Apparang watershed and the Baonto watershed is a watershed area that overlaps with the Ammatoa Indigenous Area.

The area to be covered in the program includes: in the Apparang watershed area of 10,158 ha or 43% of the total area of the Apparang watershed, in Raowa watershed area is 3,931 ha or 88.7% of the total area of the Raowa watershed, the Baonto watershed are 2,267 hectares or 26.7% of the total area of the Baonto watershed. In Total the program will cover the area of 16,356 Ha, in the three watersheds.

TABEL: VILLAGES OF PROGRAM LOCATION

Village name	Category	Location	DAS	Above sea level	Village width (Ha)	Risk/Hazard		(MHA) Ammatoa Kajang customary area
						Flood	Drought	
Kambuno	Source	Up Stream	Apparang	700	906	Low	Low	Outside MHA
Jojjolo	Receptor	Mid-Stream	Apparang	250	2226	Very High	Very High	Inside MHA
Bonto Baji	Path	Mid-Stream	Apparang	225	711	Moderate	Moderate	Inside MHA
Pattiroang	Source	Mid-Stream	Baonto	220	516	Moderate	Moderate	Inside MHA
Batu Nilamung	receptor	Mid-Stream	Baonto	200	697	Moderate	Moderate	Inside MHA
Lolisang	Path	Down Stream	Baonto	80	435	Moderate	Moderate	Inside MHA
Tana Towa	Source	Up Stream	Raowa	250	726	Moderate	Moderate	Inside MHA
Malleleng	Path	Mid-Stream	Raowa	105	545	Moderate	Moderate	Inside MHA
Lembannna	Source	Mid-Stream	Raowa	86	801	Moderate	Moderate	Inside MHA
Possi Tana	Path	Down Stream	Raowa	50	448	Moderate	Moderate	Inside MHA
Jawi-jawi	Source	Mid-Stream-Up Stream	Apparang-Baonto	442	1.714	Moderate	Moderate	Outside MHA
Tugondeng	Path	Mid-Stream	Apparang	339	1.348	Moderate	Moderate	Inside MHA
Dwi Tiro	Path	Down Stream	Apparang	50	571	Moderate	Moderate	Outside MHA
Pantama	Path	Down Stream	Raowa	55	422	Low	Low	Inside MHA

MAP OF PROGRAM LOCATION:



b. Vulnerability Status of Villages of Program Location

The main sources of Vulnerability Status were obtained from calculation of Adaptive Capacity Index (Indeks Kapasitas Adaptif/IKA) (IKA) and Exposure Index and sensitivity (Indeks Keterpaparan dan sensitifitas /IKS) in dealing with droughts and floods in each village. The Main Components of the IKA Assessment are indicators of: Education, Health Aspects, Road Networks and Electricity which are divided into five categories of Adaptation Capacity, namely: Very Low, Low, Medium, High and Very High.

IKS is structured with indicators: the number of residential buildings on the riverbank, drinking water sources, livelihoods, poverty levels, heads of families who live on riverbanks. The IKS assessment uses five categories to describe the level of sensitivity and level of exposure to droughts and floods, namely: Very Low, Low, Medium, High and Very High. Vulnerability status of villages of the program location in the area of the 3 watersheds are: villages with a very high level of vulnerability (17%), high and moderate (78%) and low (5%).

To see the Adaptive Capacity Index and Exposure and Sensitivity Index in 14 program villages can be seen in the table below:

Village name	Village of Jojjolo	Score
Risk/Hazard	Flood	Very High
	Drought	Very High
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Low
	Health aspect	Very Low
	Road infrastructure aspect	Moderate
	Electrification aspect	Very High
Exposure and Sensitivity Index	Building at river bank	Moderate
	Source Clean water	High
	Source Livelihood	Very High
	Family living at river bank	Moderate
	Poverty level	Low

Village name	Village of Possi Tanah	Score
Risk/Hazard	Flood	Moderate
	Drought	Moderate
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Very Low
	Health aspect	Very Low
	Road infrastructure aspect	Very High
	Electrification aspect	Very High
Exposure and Sensitivity Index	Building at river bank	Very Low
	Source Clean water	Moderate
	Source Livelihood	Very High
	Family living at river bank	Very Low
	Poverty level	High

Village name	Village of Lembanna	Score
Risk/Hazard	Flood	Moderate
	Drought	Moderate
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Low
	Health aspect	Low
	Road infrastructure aspect	Very High
	Electrification aspect	Very High
Exposure and Sensitivity Index	Building at river bank	Very Low
	Source Clean water	Moderate
	Source Livelihood	Very High
	Family living at river bank	Very Low
	Poverty level	Very Low

Village name	Village of Bonto Baji	Score
Risk/Hazard	Flood	Moderate
	Drought	Moderate
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Very Low
	Health aspect	Very Low
	Road infrastructure aspect	High
	Electrification aspect	Very High
Exposure and Sensitivity Index	Building at river bank	Very Low
	Source Clean water	Moderate
	Source Livelihood	Very High
	Family living at river bank	Very Low
	Poverty level	Very Low

Village name	Village of Pattiroang	Score
Risk/Hazard	Flood	Moderate
	Drought	Moderate
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Very Low
	Health aspect	Very Low
	Road infrastructure aspect	High
	Electrification aspect	Very High
Exposure and Sensitivity Index	Building at river bank	Very Low
	Source Clean water	Moderate
	Source Livelihood	Very High
	Family living at river bank	Very Low
	Poverty level	Very Low

Village name	Village of Batunilamung	Score
Risk/Hazard	Flood	Moderate
	Drought	Moderate
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Very Low
	Health aspect	Very Low
	Road infrastructure aspect	High
	Electrification aspect	Very High
Exposure and Sensitivity Index	Building at river bank	Low
	Source Clean water	Moderate
	Source Livelihood	Very High
	Family living at river bank	Low
	Poverty level	Very Low

Village name	Village of Tanah Towa	Score
Risk/Hazard	Flood	Moderate
	Drought	Moderate
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Moderate

	Health aspect	Low
	Road infrastructure aspect	Very High
	Electrification aspect	Low
Exposure and Sensitivity Index	Building at river bank	Very Low
	Source Clean water	Moderate
	Source Livelihood	Very High
	Family living at river bank	Very Low
	Poverty level	Low

Village name	Village of Malleleng	Score
Risk/Hazard	Flood	Moderate
	Drought	Moderate
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Moderate
	Health aspect	Very Low
	Road infrastructure aspect	Very High
	Electrification aspect	Very High
Exposure and Sensitivity Index	Building at river bank	Very Low
	Source Clean water	Moderate
	Source Livelihood	Very High
	Family living at river bank	Very Low
	Poverty level	Very Low

Village name	Village of Lolisang	Score
Risk/Hazard	Flood	Moderate
	Drought	Moderate
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Low
	Health aspect	Low
	Road infrastructure aspect	Very High
	Electrification aspect	Very High
Exposure and Sensitivity Index	Building at river bank	Very High
	Source Clean water	Moderate
	Source Livelihood	Very High
	Family living at river bank	Very High
	Poverty level	Very Low

Village name	Village of Jawi-jawi	Score
Risk/Hazard	Flood	Moderate
	Drought	Moderate
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Low
	Health aspect	Very Low
	Road infrastructure aspect	High
	Electrification aspect	Very High

Exposure and Sensitivity Index	Building at river bank	Very Low
	Source Clean water	High
	Source Livelihood	Very High
	Family living at river bank	Very High
	Poverty level	Moderate

Village name	Village of Tugondeng	Score
Risk/Hazard	Flood	Moderate
	Drought	Moderate
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Low
	Health aspect	Very Low
	Road infrastructure aspect	Very High
	Electrification aspect	Very High
Exposure and Sensitivity Index	Building at river bank	Low
	Source Clean water	Moderate
	Source Livelihood	Very High
	Family living at river bank	Very Low
	Poverty level	Moderate

Village name	Village of Dwi Tiro	Score
Risk/Hazard	Flood	Moderate
	Drought	Moderate
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Rendah
	Health aspect	Very Low
	Road infrastructure aspect	Very High
	Electrification aspect	Very High
Exposure and Sensitivity Index	Building at river bank	Very Low
	Source Clean water	Moderate
	Source Livelihood	Very High
	Family living at river bank	Very Low
	Education aspect	Moderate

Village name	Village of Pantama	Score
Risk/Hazard	Flood	Low
	Drought	Low
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Low
	Health aspect	Very Low
	Road infrastructure aspect	Very High
	Electrification aspect	Very High
Exposure and Sensitivity Index	Building at river bank	High
	Source Clean water	Moderate

	Source Livelihood	Very High
	Family living at river bank	High
	Education aspect	High

Village name	Village of Kambuno	Score
Risk/Hazard	Flood	Low
	Drought	Low
Vulnerability score of the village		
Adaptive Capacity Index	Education aspect	Low
	Health aspect	Very Low
	Road infrastructure aspect	High
	Electrification aspect	Very High
Exposure and Sensitivity Index	Building at river bank	Moderate
	Source Clean water	High
	Source Livelihood	Very High
	Family living at river bank	Moderate
	Poverty level	Very High

Project / Programme Objectives:

Main Objective:

The overall main objective is to enhance climate resilience and build adaptive capacity toward climate change for vulnerable community through sustainable integrated watershed governance in Indigenous People of Ammatoa Kajang Customary Area in Bulukumba, South Sulawesi Province.

The program will deliver this objective and will have these four outcomes

Outcome 1. Reduced climate change vulnerability and risk by improving management and governance of watersheds in Indigenous People of Ammatoa Kajang customary area in Bulukumba.

Outcome 2. Enhanced resilience of people in Indigenous People of Ammatoa Kajang customary area with climate adaptive sustainable livelihood development and climate mitigation actions.

Outcome 3 Advanced Sustainable Integrated Watershed Governance adaptive to Climate Change on regency development planning and development budgeting in Bulukumba regency.

Outcome 4 Raising awareness and Increased knowledge of local people on the importance of watershed and climate change impact.

Project / Programme Components and Financing:

Project/Programme Components	Expected Outcomes	Expected Concrete Outputs	Amount (US\$)
Component 1: Developing model of sustainable integrated watershed management inside the Indigenous People of Ammatoa Kajang customary area (Apparang, Baontoa and Raowa Watershed)	Outcome1: Management and governance of three watersheds inside the Indigenous People of Ammatoa customary area improved.	Output 1.1. Multi-stakeholders watersheds management forum established at three watersheds inside the Indigenous People of Ammatoa Kajang customary area.	\$ 10,651.87
		Output 1.2. Watersheds governance planning and action documents formulated and agreed among stakeholders.	\$ 178,080.22
Sub Total Component 1			\$ 188,732.09

Component 2: Promoting and practicing sustainable livelihood adaptive to climate change at the three watershed landscapes in the Indigenous People of Ammatoa Kajang customary area.	Outcome 2. Resilience of people in Indigenous people of Ammatoa Kajang customary area enhanced and vulnerability to climate risk reduced	Output 2.1. Climate adaptive sustainable livelihood models practiced at 14 villages in 3 watershed landscape in Indigenous People of Ammatoa Kajang customary area.	\$ 601,978.36
		Output 2.2. Environment conservation to support sustainable livelihood adaptive to climate change done on three watersheds in Ammatoa Kajang customary area.	\$ 13,126.87
Sub Total Component 2			\$ 615,105.23
Component 3: Lobbying and Policy Advocacy for climate adaptive sustainable integrated watershed management and Climate Adaptation Action plan to regency government of Bulukumba and South Sulawesi Provincial government.	Outcome 3. Pro-climate integrated watershed management and climate change action plan integrated into regency development plan.	Output 3.1. Head of Regency regulation on watershed management and climate adaptation action is signed and released.	\$ 11,750.37
		Output 3.2. Pro-climate integrated sustainable watershed management programs budgeted in the annual regency budgeting and Climate adaptive budgeting put into regency annual budgeting	\$ 66,338.06
Sub Total Component 3			\$ 78,088.43
Component 4: Raising awareness, knowledge	Outcome 4; The value of watershed and	Output 4.1: Knowledge of local people on the	\$ 46,802.24

management and disseminating information on the importance of watershed and climate change impact to the Indigenous People of Ammatoa Kajang customary area.	impacts of climate change are understood by local people.	importance of watershed and climate change impact increased	
		Output 4.2: Project information disseminated	\$ 9,649.25
Sub Total Component 4			\$ 56,451.49
6. Project/Programme cost			\$ 938,377.24
7. Total Project/Programme Execution Cost			\$ 98,503.09
8. Project/Programme Cycle Management Fee charged by the Implementing Entity			\$ 88,134.83
Amount of Financing Requested			\$ 1,125,015.16

Projected Calendar:

Indicate the dates of the following milestones for the proposed project/programme

Milestones	Expected Dates
Start of Project/Programme Implementation	November 2020
Mid-term Review (if planned)	December 2021
Project/Programme Closing	October 2022
Terminal Evaluation	November 2022

PART II: PROJECT / PROGRAMME JUSTIFICATION

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

Departing from the aforementioned conditions, the Peasant School of PAYO-PAYO and OASE see the need for a multi-stakeholder participation approach in promoting climate change adaptation in Indigenous Peoples of Ammatoa Kajang customary area, in particular, and in Bulukumba regency level in general extent, and on pro-climate watershed management, in particular, and on climate change adaptation action plan in general.

Component 1:

Developing model of sustainable integrated watershed management inside the Indigenous People of Ammatoa Kajang customary area (Apparang, Baontoa and Raowa Watershed).

This first component of the program is expected to improve management and governance of three watersheds inside the Indigenous People of Ammatoa customary area improved; so, it will contribute to enhance resilience of the people living surrounding the watershed

This is to build a sustainable integrated watershed management model for climate change adaptation through involvement of all stakeholders related to watersheds at the area. This component will arrive at establishment of multi-stake holder integrated watershed governance and the formulation of the sustainable integrated watershed management document, along with the document is the action plan that bind all respective stakeholders.

This forum will later encourage the formulation of a sustainable integrated watershed management plan and district level climate change adaptation document as a derivative of the RAN-API/National Action Plan on Climate Change Adaptation.

After having the multi-stake holder watershed management forum, the program will be facilitating the formulation of the document of sustainable integrated watershed management and the regency level climate change adaptation action plan.

This goal will be achieved through studies and mapping of watershed areas in the Indigenous People of Ammatoa Kajang customary area in a participatory way. As well as the formulation of integrated village spatial planning policy in integrated watershed management that is adaptive to climate change. The management of watersheds in indigenous territories is important because it involves cross villages, sub-districts and districts.

The studies done to understand the whole context of the watershed and in order to be the base for the formulation of the sustainable integrated watershed management plan document and the climate change adaptation plan document. The studies will include policy analysis, institutional analysis, biodiversity and conservation assessment, assessment on the payment of environment services, community resilience analysis, as well as land use study of the villages and the area. This watershed mapping was carried out with the agenda of assessing climate vulnerability and risk and conducting watershed delineation. The watershed delineation is done by mapping the area of villages within the Ammatoa Kajang customary area and Kajang customary forest. The mapping will involve the community who are members of farmer groups or other local institutions, will also involve village governments and relevant stakeholders at various levels of the district and province. This mapping is not only by taking coordinates at village boundaries, springs in the field, prone to landslides, floods, water crises but also will track the river. There will be a series of group discussions to explore information on land use and will conduct workshops that bring interested parties to get advice and input. In line with that, it will also cover social, cultural and economic aspects.

The maps produced from this mapping will describe the spatial and social conditions correctly and will influence decision making related to natural resource management that is comprehensive and adaptive to climate change in the Ammatoa Kajang customary area. The results of this mapping are also expected to be the basis for assisting village and district governments in planning, utilizing, controlling and developing adaptive resources for climate change in the Ammatoa Kajang customary region or becoming a model for other regions in Bulukumba Regency. This system was built with features to map watershed boundaries, map main river networks and small rivers, map flood-prone points along the river flow, the length of flood inundation and the location of dams in the Kajang customary area, thus facilitating the government in monitoring and making decisions. The results of the overall steps of this component will produce an Integrated Watershed Management document and action plan and Climate Change Adaptation Action Plan document. The parties involved will understand their role and duty to take action afterwards to design a climate change adaptation program to support the resolution of problems faced by Indigenous People of Ammatoa Kajang and build the resilience of Ammatoa Kajang toward climate change.

Outcome1:

Management and governance of three watersheds inside the Indigenous People of Ammatoa customary area improved.

broken down into two main output:

- 1.1.1. The establishment of multi-stakeholder watershed management forum
- 1.1.2. The formulation of document of sustainable integrated watershed management and regency level climate change adaptation action plan.

The activities proposed are:

- 1.1.1.
 - 1.1.1.1. Series of workshop for the forum establishment.
 - 1.1.1.2. The facilitation for legalizing the forum through regency decision letter (SK Bupati).
- 1.1.2.
 - 1.1.2.1. Workshop on preparation for study for formulating integrated watershed management plan and climate adaptation action plan.
 - 1.1.2.2. Workshop for making instrument for study for formulating integrated watershed management plan and climate adaptation action plan.
 - 1.1.2.3. Ethnography, Institutional analysis, Policy Analysis, Sustainable livelihood analysis, secondary data study on watershed area.
 - 1.1.2.4. Conservation and biodiversity study on the Watershed area.
 - 1.1.2.5. Assessment on possibility of PES (Payment of Ecosystem Service).
 - 1.1.2.6. Resilience, vulnerability assessment on disaster and climate change impact.
 - 1.1.2.7. Land use assessment (FGD on land use history of village and watershed area)
 - 1.1.2.8. Establishment of participatory land use mapping teamed area
 - 1.1.2.9. Participatory mapping training

- 1.1.2.10. Land use participatory mapping
- 1.1.2.11. Area and village land use map making
- 1.1.2.12. Workshop on land use mapping result
- 1.1.2.13. Workshop on preparation of integrated watershed management plan document framework and climate adaptation action plan formulation
- 1.1.2.14. Series of workshop on formulating integrated watershed management plan and climate change adaptation action plan
- 1.1.2.15. Public consultation integrated watershed management and climate change adaptation action plan document

Establishment of Climate Change Adaptation & Integrated Watershed Management Forum

The tendency of decreasing watershed environment support capacity in the three watersheds in the Indigenous People of Ammatoa Kajang customary area occurred due to lack of synergy participation, attention, and cooperation of respective stakeholder in managing land in the upstream and middle and down-stream parts of the watersheds. Through this forum it is expected that it can become a forum to discuss issues and setting action agenda of the ecological crisis in one landscape that has been affecting the Indigenous People of Ammatoa Kajang. This forum will consist of all stakeholders from village government level, sub-district to regency level.

Formulating integrated watershed management and Climate Change Adaptation Action Plan Document.

Development planning which integrate upstream, middle and downstream is one step to minimize risk in each village within a watershed area. It will be encouraging strategic steps and collective action at the village level in dealing with problems such as the water crisis, floods and landslides using the watershed approach; because it will give the people that all villages within one watershed area are a single landscape that influences each other between villages in the upstream, middle and downstream parts. This adaptive watershed management plan is expected to contribute to the policy makers in mainstreaming adaptive initiatives in natural resource management. It is also expected that the planning will come up with concrete action of all the villagers connected with the watershed landscape.

Series of studies/assessments

The series studies/assessment will be carried out in order the finding and result analysis to be the bases for the formulation of the document of the integrated watershed management and regency climate change adaptation plan.

Participatory Mapping

In analyzing landscapes of a watershed, accurate data and information are needed. In the three watersheds located in the Indigenous People of Ammatoa Kajang customary area does not yet have data that is getting along to support the studies that will be carried out through this project. Through participatory mapping in smaller units (villages) which are divided into three zones; upstream, middle and downstream are expected to be able to find more detailed data and

information, especially the processes of land use change and water use in the last two decades. Through participatory mapping, a village map will be created and then incorporated with other villages' maps and will become a landscape map in one area of the watershed in the Indigenous People of Ammatoa Kajang area. After having landscape map that consist of all the village around the watershed, it will be used to analyze and will be the base for models of climate change adaptation actions in the Indigenous People of Ammatoa Kajang area. The mapping will be carried out in 14 project villages. The activities will include training for participatory mapping, ground tracking (village boundaries, hamlet boundaries, areas of traditional farmer groups, land use, former / landslide prone areas, flood areas, springs, fish and shrimp ponds), map making, 3D map making, map and finding presentation workshop.

Village Land Use Plans (RTGL) that are adaptive to climate change

Land Use Planning is a planning process for land use / utilization that considers development factors, both physical, social, cultural and economic factors of the community. Determination of this choice is adjusted to the conditions of each village so that it can support an increase of capacity of the watershed. Villages in the three watersheds in the Indigenous People of Ammatoa Kajang customary area do not yet have a plan based on their village conditions, let alone the plan that, paying attention to aspects adaptive to climate change. It is expected that the land use planning can be a starting point for making landscape-based planning that is able to provide guidance for village governments in carrying out programs. Land-use planning at the village level will be used as a basis for planning integrated upstream, middle and downstream in three watersheds in the Indigenous People of Ammatoa Kajang customary area. Making Land Use Planning will be carried out in 14 project villages.

Multi-stakeholder workshop at the district level

This activity is the process of delivering the results of the mapping to the parties; district government, sub-district government, village government and the community. This activity is expected to provide an understanding of the condition of the landscape that have affected the occurrence of flooding in the rainy season, water-source drought in the dry season and sea water intrusion which can affect the social economic and cultural situation in the Indigenous People of Ammatoa Kajang customary area.

Component 2:

Promoting and practicing sustainable livelihood adaptive to climate change at the three watershed landscapes in the Indigenous People of Ammatoa Kajang customary area.

This is to develop and promote a sustainable livelihood model that is adaptive to climate change based on a study of climate vulnerability and risk assessment. This effort is carried out to build a strong community resilience toward climate change. The activities that will be carried out on this component focus on strengthening the Indigenous People of Ammatoa Kajang economic sector the development of climate adaptive sustainable agriculture, plantations and livestock.

Along with the development of climate adaptive sustainable livelihood that will enhance the resilience of the community, other part of this component will be to reduce the impact of climate change through mitigation actions that will be carried out through land management. Ammatoa Kajang Customary forest covering 313.99 Ha as a central water catchment for three watersheds, especially the Raowa watershed, there will be an activity to mitigate the climate change impact at the middle and upstream, it will be implementation of land and water management appropriate technology as an answer to help preserve upstream areas in resolving or minimizing water problems, landslides and rainwater erosion.

There are four main strategies for this development of adaptive sustainable livelihood development, they are: (a). promoting and implementing agroforestry system, (b). Establishing and facilitating climate resilience women group at villages, (c). Promoting and implementing integrated farming system, and (d). Commodity diversification.

The agroforestry will be done at up-stream and middle stream villages, it is expected besides Maintain and improve local production capabilities and environmental services: Prevent soil erosion, environmental degradation; it is also expected Guarantee and improve food security, improve local energy supply, especially fuelwood, Increase, improve qualitatively and diversify production of forestry and agricultural raw materials, to increase income. The establishment of climate resilience women group aiming at encouraging the climate adaptation actions driven by women at village. The women group will be carried out several activities related to the climate adaptation, such as initiating yard gardening for household food needs, using biomass stove, etc. The integrated farming is the strategy for promoting climate adaptive farming system, it will include the system of rice intensification and livestock integrated farming. The commodity diversification is to strengthen the economic resilience of the household by diversifying the commodity they cultivate. The diversification will be banana cultivation, it is proven to be drought-proof plant at the area.

To support the agricultural activities for the adaptation the strategy also will be undertaken is water and soil conservation surrounding the agriculture and agroforestry activity. This is through developing the terasering model for agriculture cultivation and training on water and soil conservation.

Outcome 2.

Resilience of people in Indigenous people of Ammatoa Kajang customary area enhanced and vulnerability to climate risk reduced.

broken down into two main output:

- 2.1.1. Climate adaptive sustainable livelihood models practiced at 14 villages in 3 watershed landscape in Indigenous People of Ammatoa Kajang customary area.
- 2.1.2. Environment conservation to support sustainable livelihood adaptive to climate change done on three watersheds in Ammatoa Kajang customary area.

The activities proposed are:

- 2.1.1.
 - 2.1.1.1. Agroforestry field school
 - 2.1.1.2. Agroforestry Demonstration plot making
 - 2.1.1.3. Establishment of Climate resilience women group (14 villages) Operationalization of Downstream Field Officer
 - 2.1.1.4. Series of FGD with climate resilience women group at 14 villages (3 times each village)
 - 2.1.1.5. Yard gardening field school
 - 2.1.1.6. Yard gardening implementation by climate resilience women group at 14 villages
 - 2.1.1.7. Training on using biomass stove for women group at 14 villages
 - 2.1.1.8. Goat Livestock field school
 - 2.1.1.9. Goat procurement for farmer group
 - 2.1.1.10. Goat stall/shelter making
 - 2.1.1.11. Training on making organic fertilizer from goat dung
 - 2.1.1.12. Field School on System of Rice Intensification (SRI)
 - 2.1.1.13. SRI implementation
 - 2.1.1.14. FGD with farmers for Seed bank preparation
 - 2.1.1.15. Seed bank development
 - 2.1.1.16. Field school banana cultivation
 - 2.1.1.17. Banana cultivation
 - 2.1.1.18. Series of integrated pest management (6x)
- 2.1.2.
 - 2.1.2.1. Soil and water conservation training
 - 2.1.2.2. Terasering demonstration plot for soil and water conservation

Practicing and Promoting Agroforestry systems

The application of the system is part of showing the community how to implement agroforestry systems. The agroforestry system offers an agricultural system that can increase farmers' income.

In this farming system, farmers can benefit from short-term crops and long-term crops, can give income along the year. Besides being able to provide farmers with income improvement, this system can also increase soil fertility and also help prevent soil erosion. This system provides several benefits of ecosystem services such as carbon sequestration, biodiversity and conservation. The agroforestry model will try to see plants according to the level of needs of indigenous people, which are divided into three land management concepts: First, long-term crops such as wood that can be harvested 10 to 15 years. This concept will try to answer the long-term economic needs of indigenous peoples such as building houses, education for their children, weddings and circumcision (the circumcision for female currently changing to only the ritual, no more genital mutilation practice; thus the project will not contribute to the issue of against human right violence related to female genital mutilation). So, when they need it, they no longer sell land to cover that need. This is the concept of long-term economic savings of indigenous peoples' families. Second, medium-term crops that can be harvested annually such as cloves, cocoa, rubber and pepper. This will try to answer needs such as health costs, the needs of family cultural event like weddings and other customary events. Third, short-term crops such as chilies, peanuts, sweet potatoes, cassava and other crops can increase the economic for immediate daily needs of the families of indigenous peoples. So that the family economy of the Ammatoa Kajang indigenous people is well planned, and is able to cover the economic needs of the family, at different levels.

House yard gardening

House yard garden is for vegetables cultivation around the house to meet household needs. A small piece of land near the house can be used to grow vegetables such as kale, spinach, chili and beans. This will help reduce the expenditure of households. This activity will involve women as an effort to strengthen the household economy through women's gardening activities.

Bio-mass cookstoves

This bio mass stove is one alternative in reducing the use of petroleum gas. The petroleum gas that cost IDR 20,000 / 3 kg have become burden for household at Indigenous People of Ammatoa Kajang. Moreover, in a month the average uses of petroleum gas is around Rp. 60,000. In addition to suppressing household expenditure, this bio-mass stove can also reduce excessive use of wood for cooking. This bio-mass stove still uses wood but only a few and only wood branches, it only 20 percent using wood comparing to conventional wood stove. So, this is suitable in the Ammatoa Kajang customary area.

Integrated farming system

In a constantly changing climate, farmers often experience crop failures. Harvest failure is very influential on the economy of Indigenous People of Ammatoa Kajang. Through this integrated farming system, it will integrate plant cultivation and livestock. This is the closed-system of farming and livestock, all the agriculture resources will be utilized inside the cycle, close-loop. The waste from farm field will utilized for livestock and vice versa. As the result it will cost effective and give economic value to farmers.

SRI (System of Rice Intensification)

SRI is rice farming systems that are resistant to climate change. This rice cultivation system is able to increase yields with. The SRI method is an innovation to improve the food security of small-scale farmer households. This system can also reduce the need for chemical inputs, reduce water use, and encourage the use of organic fertilizers, thereby reducing production costs. This rice intensification system is very suitable in the Indigenous People of Ammatoa Kajang customary area where most rice fields are rain fed and experience drought during the dry season.

Development of banana plants

Banana plants are suitable for tropical regions with high air humidity and quite hot weather conditions. This plant can survive in areas that lack water, because bananas can supply water from stems that have high water content. This kind of plant is very adaptive to climate related weather and condition.

Seed Bank

Rice, cloves and pepper are the main plants in the Indigenous People of Ammatoa Kajang region. The Seed Bank is planned to improve the existing seeding system and also acts as a source for planting if the seed reserves elsewhere are destroyed or lose due to climate change related circumstances. Seed banks will be managed by traditional farmer groups. At the Seed Bank it will.

Soil and Water Conservation

Soil conservation to encourage ways of use of soil that are appropriate to the ability of the soil to prevent soil damage, soil conservation as an effort to prevent soil damage by erosion and repair soil damaged by erosion. Water conservation in principle is the use of rainwater that falls to the ground for agriculture as efficiently as possible, and regulates the flow time so that there is no destructive flooding and there is enough water during the dry season. this is to support the farming practices to adapt to the climate change. The villagers will be equipped and encourage to do soil and water conservation.

Component 3:

Lobbying and Policy Advocacy for climate adaptive sustainable integrated watershed management and Climate Adaptation Action plan to regency government of Bulukumba and South Sulawesi Provincial government.

Third is an effort to ensure the sustainability. Component 3 is policy advocacy at the district level by encouraging the making of the Regency Regulation on Adaptation to Climate Change as the foundation of the village government to produce regulations at the village level. Regulations in the form of regency regulations and regulations in the form of village regulations are ways to facilitate the flow of budget policies for climate change adaptation actions, both at the district government level and at the village government level.

In addition to this regulation, it aims to create budgeting policies at the village and district levels. The approach in making this regency regulation will involve the relevant agencies at the district

level as members of the task force in drafting and making regulations. This approach was carried out based on our experience that had been successfully carried out drafting Regency Regulation No. 09 of 2015 concerning, Recognition of the Rights and Protection of the Rights of Indigenous Peoples of Ammatoa Kajang and the preparation of Regency Regulation Number 41 on the Empowerment of Indigenous People of Ammatoa Kajang which has received various awards at national level. Furthermore, this program aims to encourage the establishment of a multi-stakeholder integrated policy in Bulukumba regency in supporting the Climate Change Adaptation Action Plan from local to national levels. As well as the establishment of pro-climate Sustainable integrated management of watershed-based climate change adaptation.

Outcome 3.

Pro-climate integrated watershed management and climate change action plan integrated into regency development plan.

broken down into two main output:

- 3.1.1. Head of Regency regulation on watershed management and climate adaptation action is signed and released.
- 3.1.2. Pro-climate integrated sustainable watershed management programs budgeted in the annual regency budgeting and Climate adaptive budgeting put into regency annual budgeting

The activities proposed are:

- 3.1.1.
 - 3.1.1.1. Series of discussion of multi-stakeholders watershed management coordination forum to formulate and finalizing regent regulation on integrated watershed management and climate adaptation action plan(10 times).
 - 3.1.1.2. Public consultation of regent regulation on integrated watershed management and climate adaptation action plan of Bulukumba regency.
 - 3.1.1.3. Legalization of Regent regulation on Integrated watershed management and climate adaptation action plan.
- 3.1.2.
 - 3.1.2.1. Series of discussions and finalization of revision / drafting of Pro Climate Change Adaptation Village development planning (RPJMDes) at 14 villages.
 - 3.1.2.2. Public consultation of Pro Climate Change Adaptation Village development planning (RPJMDes)
 - 3.1.2.3. Roadshow to internalize the integrated watershed management framework to the provincial government development plan (Governor, Bappeda, DLHK, BP-DAS LH)

Series of Discussion for formulating the regency regulation.

The discussion in this process is the discussion for drafting and finalizing the regency regulation on integrated watershed management and regency level climate change adaptation action plan.

Public consultations on draft of Regency Regulation on Integrated watershed management and Climate Change adaptation Action Plan for Indigenous People of Ammatoa Kajang Customary Area and Bulukumba Regency.

This public consultation is to convey to the parties the draft policy that has been made. This is important to inform the public that there is a policy that is being made. In addition, this public consultation will also provide feedback, suggestions and input from the public and all parties regarding the regulation, so that the task force team can improve the draft again.

Signing the regulation by the head of Regency of Bulukumba

The draft policy regulations that have been made are submitted to be reviewed by the Legal office of Bulukumba Regency. Through this process the legal office will review the content and context stipulated in the policy. Usually after review still something to be corrected and returned to the task force team. After completing all the correction of the initial draft, the legal department submits the text to the head of regency of Bulukumba to be signed and issued as a legal entity regulation. Then the regulation is applicable to all parties to implement adaptive programs for climate change in the Indigenous People of Ammatoa Kajang customary area and in Bulukumba Regency.

The Village Mid-Term Development Plan (RPJMDes) which accommodate climate adaptive watershed management.

With the Village Act Number 6 of 2014, where villages are given greater authority and funds; greater opportunity is opened to integrate the issue of watershed management into Village Mid-Term Development Plan (RPJMDes). So far, the watershed management system (DAS) is still top-down, where the central government and local governments have full authority over watershed protection. However, we see inter-village alliances to be an important part for conserving natural resources because they are the beneficiaries as well as recipients of the direct impact of watershed damage. Therefore, adopting adaptive watershed planning into the village medium term development plan is quite important given that the village medium term development plan is the main document in village development planning.

Public consultations on Pro Climate Change Village Mid-Term Development Plan (RPJMDes)

This public consultation is to convey to the parties the draft of RPJMDes that has been made. This is important to inform the public that there is a policy that is being made. In addition, this public consultation will also provide feedback, suggestions and input from the public and all parties regarding the regulation, so that the task force team can improve the draft again.

Road show

This road show activity is visiting the Bulukumba Regency and South Sulawesi Provincial government offices to present the document of integrated watershed management and Climate change adaptation action plan that had been made. This is to lobby and advocate a budgeting policy

strategy so that the relevant offices can support climate change adaptation actions in their development activities and programs. to be visited include; BAPPEDA (Regency Development Plan Agency), Environment and Forestry Service (DLHK), Water Resources Service, Agriculture and Plantation Service, Food Security Agency, Community and Village Government Empowerment Service, Public Works Agency (PU), etc.

Component 4:

Raising awareness, knowledge management and disseminating information on the importance of watershed and climate change impact to the Indigenous People of Ammatoa Kajang customary area.

This component aims to: a) increase the understanding by local stakeholders about the value of the watershed ecosystem and the impacts of climate change to build support for the integrated watershed management plan and regency level climate change adaptation plan.

b) provide regular and accessible public information on climate change effects and the importance of the watershed to promote behavior change.

Outcome 4;

The value of watershed and impacts of climate change are understood by local people.

broken down into two main output:

- 4.1.1. Knowledge of local people on the importance of watershed and climate change impact increased.
- 4.1.2. Project information disseminated

The activities proposed are:

4.1.1.

4.1.1.1. KAP Baseline and end line survey.

4.1.1.2. Awareness rising campaign.

4.1.1.3. Academic writing and project lesson learned book

4.1.2.

4.1.2.1. Villagers discussion forum on watershed management and climate change

4.1.2.2. Project dissemination seminar

KAP Baseline and End line survey

The knowledge, attitude and behavioral practice (KAP) survey on the value of watershed and the climate change issue is to identify needs and understand gaps in the knowledge, attitudes and behavioral practices of local community at the Ammatoa Kajang Customary Area. The results of the KAP survey will be used in the design of targeted the knowledge and awareness raising programs. KAP survey results will also be used in the design of a communications strategy to improve the

knowledge, attitudes, and practices of targeted people. The project will ensure that women and indigenous groups are given special attention.

Awareness raising campaign

Designing and conducting a coordinated awareness raising campaign strategy to change public attitudes and behavior. The strategy will provide a framework for delivering targeted key messages on climate change issues and watershed ecosystem and management. The target of the campaign are all the villagers at the project villages and the regency stakeholders related to the watershed. It will follow the result of the KAP survey for the strategy and the actions to raise awareness of climate change and its impacts and watershed value, and the appropriate medium and method for communicating the issues. The strategy will focus on the adaptation element, which is concerned with impacts of a changing climate on society, the economy and the environment, and promotes activities to reduce vulnerability of livelihoods to extreme weather events and other longer term changes in our climate. The communication strategy will aim to: a) raise the level of awareness of local communities on the opportunities and threats brought about by climate change, and the roles they can play in adapting to its impacts; and the importance of watershed and b) provide guidance and best practice tools on how to communicate adaptation to climate change. The goal will be to create a well-informed-community about climate change and thus make responsible action.

Academic writing and project lesson learned book

This is part of the knowledge management. The activity aim to provide the information knowledge on the issues of integrated watershed management and climate change adaptation with the ground local context empirical knowledge, experience and lessons. The academic writing will produce the manuscript that will be publish in an academic journal, and will give the theoretical and empirical base on the issue of watershed management and the impact of climate change within the context of Indigenous People of Ammatoa Kajang. While the lesson learned book will provide the learning from the project at the watershed management and climate change impacts at broad.

Villagers discussion forum on watershed management and climate change

Local community individually would not be able to effectively participate in and contribute to climate change initiatives at wider level and advocate for improvements in their livelihoods in isolation from each other. The project will therefore support the learning and dialogues forum among the community members who face similar challenges to adapt to climate impacts. The communities will learn from each other’s climate adaptation and watershed management.

Project dissemination seminar.

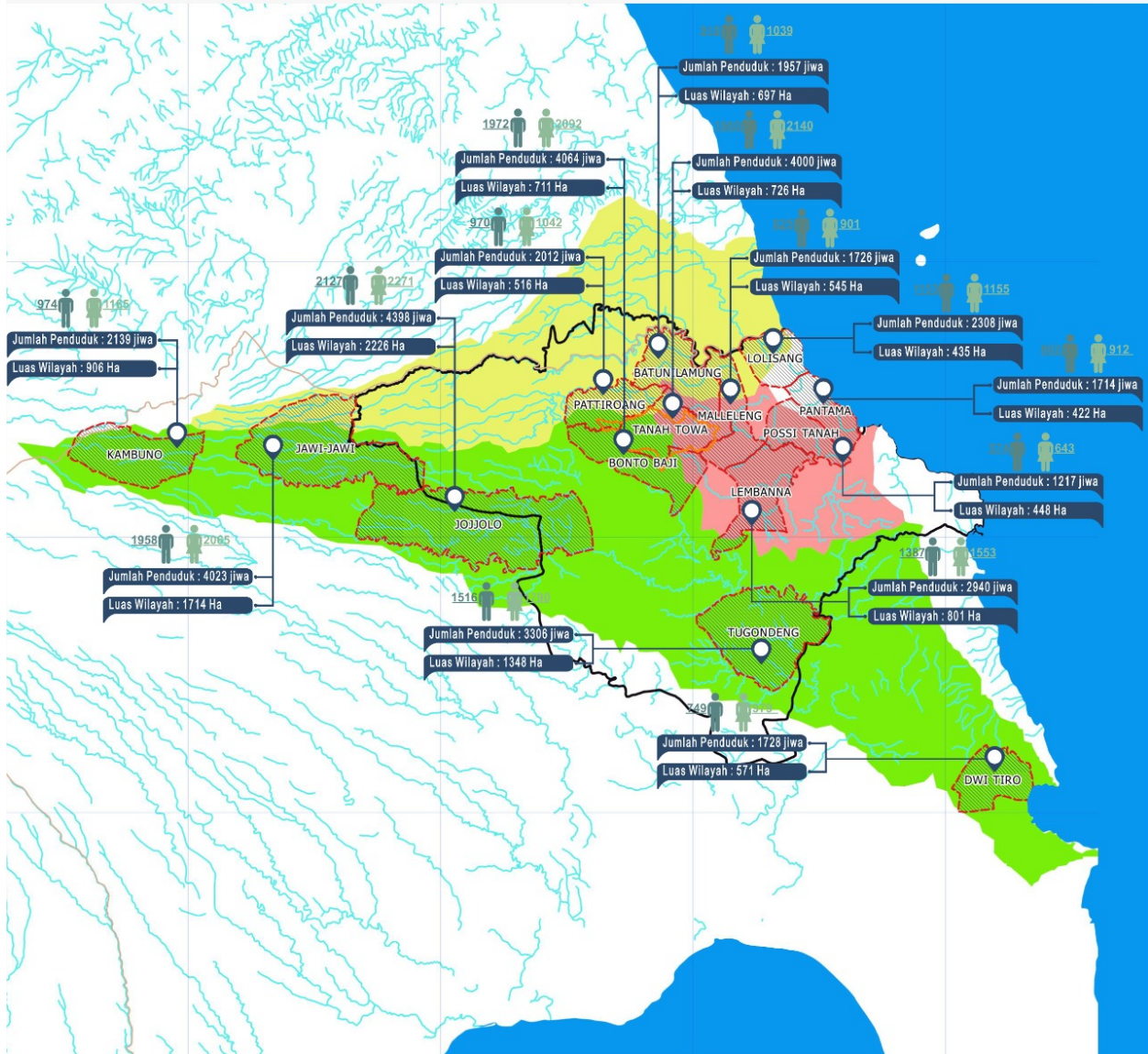
The seminar event is to promote and disseminate the information about the project. it will be conducted at the regency level, it will involve all broad audience at the regency level.

The project will be carried out at 14 villages inside the Indigenous People of Ammatoa Kajang Customary Area:

No	Villages	Sub-district	Watershed (DAS)
1	Kambuno	Bulukumpa	Up-stream - DAS Apparang
2	Jawi-Jawi	Bulukumpa	Up-stream DAS Baonto - Mid-stream DAS Apparang

3	Jojjolo	Bulukumpa	Mid-stream DAS Apparang
4	Tugondeng	Herlang	Mid-stream DAS Apparang
5	Dwi Tiro	Bonto Tiro	Down-stream DAS Apparang
6	Bonto Baji	Kajang	Mid-stream DAS Apparang – Up-stream DAS Raowa
7	Lembanna	Kajang	Mid-stream DAS Raowa
8	Tanah Towa	Kajang	Up-stream DAS Raowa - Mid-stream DAS Apparang
9	Possi Tanah	Kajang	Mid-stream DAS Raowa
10	Pantama	Kajang	Down-stream DAS Raowa
11	Malleleng	Kajang	Mid-stream DAS Raowa - Mid-stream DAS Baonto
12	Lolisang	Kajang	Down-stream DAS Baonto
13	Batu Nilamung	Kajang	Mid-stream DAS Baonto
14	Pattiroang	Kajang	Mid-stream DAS Baonto - Mid-stream DAS Apparang

Map Of Project Target and Beneficiaries



No	Villages	Sub-district	Population		
			Woman	Man	Total
1	Kambuno	Bulukumpa	1165	974	2139
2	Jawi-Jawi	Bulukumpa	2065	1958	4023
3	Jojjolo	Bulukumpa	2271	2127	4398
4	Tugondeng	Herlang	1790	1516	3306
5	Dwi Tiro	Bonto Tiro	979	749	1728
6	Bonto Baji	Kajang	2092	1972	4064
7	Lembanna	Kajang	1553	1387	2940
8	Tanah Towa	Kajang	2140	1860	4000
9	Possi Tanah	Kajang	643	574	1217
10	Pantama	Kajang	912	802	1714

11	Malleleng	Kajang	901	825	1726
12	Lolisang	Kajang	1155	1153	2308
13	Batu Nilamung	Kajang	1039	918	1957
14	Pattiroang	Kajang	1042	970	2012
Total			19.747	17.785	37.532

B. Describe how the project / programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project / programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy of the Adaptation Fund.

This project will be implemented in 36 villages in the MHA area of Ammatoa Kajang which have received recognition of rights and protection of rights to the community and its territory from the government of Bulukumba Regency through Regional Regulation (PERDA) No. 09 of 2015. Also, has obtained customary forest designation from the Ministry of Environment and Forestry (KLHK) with decision letter 6746 / MLHK-PSKL / KUN.1 / 12/2016, covering an area of 313.99 Ha. However, only 14 villages that are considered important will be the focus of the project they are selected based on the division of 3 watersheds (upstream-middle-downstream) in Ammatoa Kajang Indigenous People customary area. 24 other villages will be involved in socialization and seminar activities.

Communities in this region depend on agriculture, with most growing single crops such as corn, coconut and rice. Therefore, most of these farmers are financially very weak, making them vulnerable to the effects of climate change. The main beneficiaries of this project are small and marginal farmers (with land ownership of between 0,5 to 2 ha). In addition, women who live in project locations spread in indigenous territories will be involved up to 30% -40%.

For the social sectors, by this program, woman group that is most vulnerable in communities need to be strengthen at village level. By actively involving them as a social group to participate at household, community and village level make them more self-confident to take decision and action on mitigation of climate change impacts.

Sustainability Development Criteria:

The project meets various sustainability development criteria such as social wellbeing, economic benefit, environmental advantage, institutional and financial benefits. With the restoration of local eco-system, eco-system services are expected to contribute building better resilience. Detail of benefits envisaged from different sustainability criteria is discussed in the table below.

Criteria	Description	Benefit
Economic	Agro-forestry Practice and application	This activity was carried out in 14 villages with a total of 900 families. The cost for activities is Rp.1.769.175.000

		<p>The implementation of this agroforestry farming system is at least 0.5 ha per family. So that it requires an area of 450 ha. Average costs incurred for each land are Rp. 1,310,500 / 0.5 ha of land. And average Rp. 1,300,000 per household. In term of the output the activity will give around Rp. 20.000.000 addition to household income per year per household.</p>
	House yard gardening	<p>It will be done in 14 villages; each village has one climate-resilient women group with. 25 members. Total climate resilient women in 14 villages as many as 450 household. The costs for activities are Rp. 1,007,190,000. Averaged, the cost of each person to make a garden is as much as Rp 2,238,200. This is quite efficient compared to government programs that can double the cost. In term of the output of the garden; it will reduce household expenses by Rp. 3,650.000 per year by producing their own vegetables and ingredients. If it is counted for 900 household it will give back economic value up to Rp. 3,285,000,000 per year.</p>
	Compost hole	<p>This activity will be carried out by 14 groups of climate-resilient women with a total of 450 people. This compost hole is made near the house as an alternative to chemical fertilizer that can be applied to their garden. The cost for making this compost hole is Rp. 307,710,000. Average costs is Rp.683,800 / compost hole. It will save</p>

		around Rp. 200,000 per planting season or it can reach Rp. 1.200.000 per year. Give back economic benefit up to Rp. 540.000.000 per year for 450 household.
	Biomass cookstove	The cost estimated to be around Rp. 875,700,000 with the number of beneficiaries of 450 families. Average Rp. 1,956,000 / piece. Comparing to conventional petroleum gas stoves in general this is more expensive. However, for long-term need, it is more efficient because the cost is only Rp.450 per month with an average usage of 6 hours per day. In addition, it can reduce wood use by up to 80%. This means that this is very suitable in the area around the forest to reduce forest encroachment. It will give back economic value for Rp. 324.000.000 per year for 450 household.
	Integrated farming system	This activity will be carried out in 14 villages with the number of direct beneficiaries of 450 families divided into 14 groups. Each group has 25 members. Total costs is Rp 3,485,154,000 in 14 groups. If averaged, each group costs Rp.193,619,666. Each group will be given 25 female and 3 male goats. It will give back economic value for Rp. 225.000.000 per group per year or Rp. 4,050,000,000 per year. More than the cost spend for the activity. It will also benefit from the fertilizer from the goat dunk, calculated Rp. 2,000,000 per month per group, it will reach Rp. 432,000,000 per year for all 14 groups.

	System of Rice Intensification	The SRI is the rice cultivation system that is resistant to climate change. This activity will be carried out in 11 villages with the number of direct beneficiaries is 450 families. The cost is Rp. 602,730,000. Averaged cost of 0.5 ha per household is as much as Rp. 1,399,400. It will increase the income from the rice field up to Rp. 3,000,000 per ha.
	Banana planting	This activity will be carried out in 14 villages with the number of direct beneficiaries are 450 families. The cost of this activity is Rp. 1,198,806,000. Averaged for each family of one hectare, then the cost of each hectare is IDR 2,664,013. From the banana planting the household can increase income each of Rp. 750,000 / month. Rp. 9,000,000 per year per household. Rp. 4,050,000,000 per year for 450 beneficiaries.
Social	Women Involvement	Most of the activities of the project will involve women as the protagonist group, they will be encouraged to participate meaningfully in the whole process of the project. The main beneficiary of the project will be women.
Environment.	Agroforestry	helps in sequestering atmospheric carbon dioxide and helps in reducing emission and global warming
	Afforestation	It will help to afforestation of 67.5 Ha forest inside the Indigenous people of Ammatoa Kajang
	Mangrove conservation	It will have to conserve the coastal area of approximately

		50 Ha, and will help to prevent sea water intrusion.
Institution	Establishment of Integrated watershed forum	Ensure the sustainability of watershed management, with involvement of all respective stakeholders

As discussed above on different sustainability criteria, implementation of the project will not cause any negative social and environmental impacts. Local communities have been consulted in design of the project and components proposed are in line with the prevalent regulations, policies and standards of National and Sub-national Governments. Components proposed under the project have been designed with consideration towards the environmental and social principles as outlined in the Environmental and Social Policy of Adaptation Fund.

The majority of activities are agriculture-based activities aimed at increasing farmers' resilience to the effects of climate change. The implementation of this activity does not have a negative impact on the environment and the community itself. Instead, activities are intended for community and environmental improvement. However, as a precautionary measure, an appropriate mechanism will be carried out to identify and assess risks during project implementation and management plans will be carried out if there are significant risks that should guarantee appropriate mitigation.

Principles in project implementation;

- A. Community Participatory Principles. Accompanied community to make work plan by involving all groups in communities including the most vulnerable groups such as women groups, disabilities, the elderly and local people; and (2) the mechanism of the all parties on the distribution of benefits program will build agreed;
- B. Principles of Gender Equality and involvement of women. Gender Equality and Women's Empowerment. The gender will be mainstreamed in all activities such as, women participation in decision making. The project will ensure women's involvement in all key project activities, such as participatory mapping, will also use gender analysis and gender stakeholder consultation in every forum formed by the project; so, there is always active engagement in those important project activities. The project will ensure not only aspects of the proportion of women but also ensure the involvement of women by making specific activities targeted at women, such as field school for women on yard gardening, workshop on women role on climate change adaptation to ensure active and meaningful participation of women in the project. The project beneficiary unit is the family, the project will ensure that the household representative involved are women from each household of project target.
- C. Principles of Access and Equality. This program will facilitate land use plans in the village development plan. Community, village government and district government will make participatory planning to address the adverse effects of climate change and build resilience of communities and governments to adapt to climate change

- D. Principle 4: Human Rights. The program will give more widely information to communities and opportunity to be involved in the program as a Free Prior and Informative Consent (FPIC). And then, involve in design, make work plan and monitor the action that they arrange before.
- E. Principles of Climate Change Adaptation. Increasing the capacity of the community and government and encouraging policies and regulations to reduce the impact of climate change, adapt and reduce the impact of climate change with good Human Resource and Natural Resources management plans.
- F. The principle of multi-stakeholder participation. Involving all stakeholders from the community, village government, district government level to participate in participatory processes so that the understanding of learning and the objectives of the activities can be fully understood.

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

The total cost of the project implementation plan in the Kajang customary area is Rp. 15,075,203,084 (US\$ 1,125,015,16) Which will have an impact on 36 villages, 4 sub-districts, 3 watersheds in Bulukumba Regency and some part of Sinjai Regency will also benefited from the project. This project will also have an impact on the improvement of Natural Resources in the Indigenous People of Ammatoa Kajang customary area covering an area of 22,592.87 and has an impact on increasing Human Resources with a population of 48,411 people (BPS Bulukumba, 2016).

The project budget will be used to improve the skills, knowledge and ultimately the resilience of the Ammatoa Kajang indigenous people, the village government and the government of Bulukumba Regency to be more adaptive toward climate change. And not less important, the use of the budget for this project, will result in inter-sector collaboration in planning and implementation to build 3 watersheds in the Ammatoa Kajang customary area. It is expected it will be part of the strategy for the commitment for budgeting policies from the Regency offices funds from the village government to program the activities supportive to climate change adaptation in 3 watersheds in the Ammatoa Kajang Indigenous People customary area in the future.

Aside from being an effort to build resilience facing climate change. The use of fund in this program is an effort to improve the capacity and minimize the impact of flooding the affect roads, settlements and rice fields, the impact of drought both to agriculture irrigation and to household water needs, landslide and sea water intrusion impact. The efforts eventually will benefit the Indigenous people economically and socially.

There are 4 main part of the program that will be funded through this project:

1. Build an integrated and adaptive watershed management model for climate change.

The total fund for activities of this part is in the amount of US\$ 188,732.09 which aims to produce a risk and vulnerability assessment of the community and the Integrated watershed management

document and action plan. As well as to produce participatory Climate Change Adaptation action plan document at the regional level, this document is a derivative form of implementation of the National Action Plan on Adaptation to Climate Change (RAN-API). Documents produced through the discussion series among stakeholders village government and the community through the Climate Change Adaptation forum that will be formed through this project. there will be also establishment forum for Integrated watershed management and Climate change adaptation forum.

The use of this budget will also produce vulnerability maps, land use maps, altitude maps along with objective information about spatial land use in the Ammatoa Kajang Indigenous People customary area. In this activity will involve 432 mapping personal in 14 villages and 14 village heads plus 12 community members who will be involved in the preparation of the Climate Change Adaptation document. With the amount of the budget used in the component of this program, there has been a shared understanding by the parties both at the village and district level. The Climate Change Adaptation document based on the results of spatial and social vulnerability studies conducted in a multi-stakeholder participatory method.

2. Development of a sustainable livelihood model that is adaptive to climate change to increase community resilience.

The implementation of the development of a sustainable livelihood model that is adaptive to climate change aims to increase people's economic income through natural resource management and activities. This component will use fund of US\$ 615,105.23 . The activities to be carried out in the development of this sustainable livelihood model are activities that will enhance the resilience of Ammatoa Kajang Indigenous People.

The activities of this component are alternative economic activities while at the same time maintaining the socio-cultural values derived from land management and more economical technology inputs to save the use of household expenditure costs. SRI rice cultivation will also be carried out as a scenario to overcome water shortages for rice fields in the dry season. Other activities such as agroforestry, integrated sustainable farming and livestock also expected to improve the economic resilience of the community, which is eventually will increase the resilience toward climate change impact.

3. Policy advocacy for regency regulation and Budgeting on Climate Change Adaptation Action Plan & Integrated Watershed Management.

The use of the fund in this component is US\$ 78,088.43 to support the produce of regency policy on Climate Change Adaptation Action Plan. The activities also to support the lobby to the regency government to put budget for climate change adaptation action plan and budget for integrated watershed management on their development activities budget. The issuance of the regency regulation will be the basis for the offices and the village government to budget and program the Climate Change Adaptation activities after the project ends. This regency regulation is based on the Climate Change Adaptation document that has been made.

4. Raising awareness, knowledge management and disseminating information on the importance of watershed and climate change impact to the Indigenous People of Ammatoa Kajang customary area.

The use of the fund in this component is US\$ 56,451.49 to support the knowledge management, awareness raising campaign, and information dissemination.

In sum, From the moderate calculation, the indicative number, it can be stated that the use of project funds of approximately IDR. 15,075,203,084 (US\$ 1,125,015,16) will effectively have an impact on the community in amount of IDR. 123.429.000.000 (US\$. 8,816,357), in the medium term, calculated from economic value generated from livelihood activities IDR. 22,254,000,000 (US\$. 1,589,571), and economic value of lost saving from mitigation activities IDR. 98,610,000,000 (US\$. 7,043,571). Besides, there is also economic value from government budgeting in the amount of IDR. 2,565,000,000 (US\$. 183,214) from regency budget and village budget.

The detail illustration of cost effectiveness and economic return show below:

Activities	Cost-Effectiveness	Benefit
1. Management and governance of three watersheds inside the Indigenous People of Ammatoa customary area improved.		
Vulnerability assessment		
Participatory village-based watershed mapping	<p>This activity will be carried out in 14 villages involving 972 people and village government staffs. Costs incurred for this activity amounted to Rp.2,237,962,500. This activity will make watershed landscape studies easier. On the other hand, it will be a lesson for the community and village government to know their village spatially. This activity includes training villagers that ultimately will also increase capacity of the community by having spatial knowledge and conciseness of their area.</p> <p>This costs for the activity average per village map is around Rp.82.000.000, is less than average cost if the mapping done by third party, the third party service cost for</p>	<p>It will contribute to the improvement of capacity and increasing resilience of the community toward climate change impact. Ultimately it will contribute to mitigate the lost from the flooding, extreme drought and sea water intrusion.</p> <p>The lost estimated: from flooding Rp. 6,314,000,000 per year. From drought Rp. 64,016,000,000, from sea water intrusion Rp. 28,280,000,000. Total lost from the three climate related disaster events estimated to be Rp. 98,610,000,000 per year.</p>

	mapping is around Rp.100.000.000; hence through this program it is more effective against the cost spent by village government to produce village map using third party service.	
Climate change adaptation forum	This activity involved 40 people from the village government and sub-district government. The cost for this activity is Rp.26,670,000. this is a forum for policy makers in developing integrated watershed management and climate change adaptation action plan. The forum is very effective in building common ground to create a program in overcoming the problems found in the village. The effectiveness of this forum is also to hack into the selfishness of each village that has only been concerned with their respective regions. In term of the expected impact, the activity will be effective to contribute to build resilience of the community; with relatively less cost.	Same as above
Village mid-term development planning (RPJMDes) integrating climate adaptive watershed management	The climate adaptive watershed management integrated RPJMDes will involve 738 people in 14 villages at a cost of Rp. 604,672,500. The average costs incurred by each village is as much as IDR 33,592,916. This is much cheaper compared to the funding used by the village government is around Rp.50,000,000 on formulating the RPJMDes.	Same as above
Climate Adaptive Village Land Use Planning	This activity will be carried out at 14 villages involving 630 people. Costs incurred for this activity amounted to Rp. 655,290,000. Average, each	Same as above

	village spends a budget of Rp.36,405,000. Against the third party service the program cost for this activity is cheaper, the average market cost for this kind of service is Rp. 50.000.000.	
2. Resilience of people in Indigenous people of Ammatoa Kajang customary area enhanced and vulnerability to climate risk reduced		
Output 2.1: Climate adaptive sustainable livelihood models practiced at 14 villages in 3 watershed landscape in Indigenous People of Ammatoa Kajang customary area.		
Agro-forestry Practice and application	This activity was carried out in 14 villages with a total of 900 families. The cost for activities is Rp.1,179,450,000. The implementation of this agroforestry farming system is at least 0.5 ha per family. So that it requires an area of 450 ha. Average costs incurred for each land are Rp. 1,310,500 / 0.5 ha of land. And average Rp. 1,300,000 per household. In term of the output the activity will give around Rp. 20.000.000 addition to household income per year per household; hence the activity has cost-effectiveness.	From this activity 900 household will be the recipients of beneficiaries are expected to be able to get economic added value in amount of around Rp. 20.000.000 per year per household. Rp. 18,000,000,000 per year for 900 household
House yard gardening	It will be done in 14 villages; each village has one climate-resilient women group with. 25 members. Total climate resilient women in 14 villages as many as 450 household. The costs for activities are Rp. 1,007,190,000. Averaged, the cost of each person to make a garden is as much as Rp 2,238,200. This is quite efficient compared to government programs that can double the cost. In term of the output of the garden; it will reduce household expenses by Rp. 3,650.000 per year by producing their own	Through this activity, it is expected that it can reduce household expenditure every day and can increase family nutrition from the garden. The output of the garden could reach Rp. 3,285,000,000 per year for 450 household.

	vegetables and ingredients. If it is counted for 900 household it will give back economic value up to Rp. 3,285,000,000 per year.	
Biomass cookstove	The cost estimated to be around Rp. 880,200,000 with the number of beneficiaries of 450 families. Average Rp. 1,956,000 / piece. Comparing to conventional petroleum gas stoves in general this is more expensive. However, for long-term need, it is more efficient because the cost is only Rp.450 per month with an average usage of 6 hours per day. In addition, it can reduce wood use by up to 80%. This means that this is very suitable in the area around the forest to reduce forest encroachment. It will give back economic value for Rp. 324.000.000 per year for 300 household.	With biomass stoves, the community can reduce the expenses for 3 kg petroleum gas. The average use every month is 3 gas cylinders of 3 kg. One gas cylinder at Kajang costs Rp. 20,000. This means that every month people spend Rp. 60,000 to buy gas cylinders. If calculated, in one year the community must set aside Rp.720,000 to provide gas cylinders. With this biomass stove, people can save Rp.720,000 every year. Rp. 324.000.000 per year for 450 household.
Integrated farming system	This activity will be carried out in 14 villages with the number of direct beneficiaries of 450 families divided into 14 groups. Each group has 25 members. Total costs is Rp 3,485,153,988 in 14 groups. If averaged, each group costs Rp.193,619,666. Each group will be given 25 female and 3 male goats. It will give back economic value for Rp. 225.000.000 per group per year or Rp. 4,050,000,000 per year. More than the cost spend for the activity. It will also benefit from the fertilizer from the goat dunk, calculated Rp. 2,000,000 per month per group, it will reach Rp. 288,000,000 per year for all 14 groups.	One female goat gave birth 3 times for 2 years with 5 goats. This means that with the number of brooders 25 goats with an average birth of 5 goats for 2 years, the goats in each group reached 125 goats. Goat average price is Rp. 1,800,000, one group gets Rp. 225,000,000 from the sale of 125 goats. It will be Rp. 4,050,000,000 In addition, each group will get benefits from managing goat manure into compost. This compost fertilizer can reduce the use of chemical fertilizers, up to Rp. 288,000,000
System of Rice Intensification	The SRI id the rice cultivation system that is resistant to	The application of the SRI system to the community will

	<p>climate change This activity will be carried out in 14 villages with the number of direct beneficiaries is 450 families. The cost is Rp. 602,730,000. Averaged cost of 0.5 ha per household is as much as Rp. 1,399,400. It will increase the income from the rice field up to Rp. 3.000.000 per ha; hence in term of the output this activity is effective.</p>	<p>increase the economics of household by an average of 3 to 4 million rupiah per family. Hence from the project it will give economic benefit up to Rp. 900,000,000 per season or Rp. 1,800,000,000, more than the activity cost spend from the project.</p>
Banana planting	<p>This activity will be carried out in 14 villages with the number of direct beneficiaries are 450 families. The cost of this activity is Rp. 1,198,806,000. Averaged for each family of one hectare, then the cost of each hectare is IDR 2,664,013. From the banana planting the household can increase income each of Rp.750,000 / month. Rp. 9,000,000 per year per household. Rp. 4,050,000,000 per year for 450 beneficiaries.</p>	<p>From the banana planting the household can increase income each of Rp.750,000 / month. Rp. 9,000,000 per year per household. Or the economic value output of the activity could reach Rp. 4,050,000,000 per year for 450 beneficiaries.</p>
Seed bank	<p>To preserve the local seeds of Indigenous People of Ammatoa Kajang, thereby reducing the cost of purchasing seeds. This seed bank is to preserve the local seeds and to maintain the quality of local seeds and ensure timely availability. The proposed budget for this activity is IDR 255,315,000. The benefit of the activity is priceless; so, it should be regard as very cost-effective.</p>	<p>Very high cultural intangible value and benefit from the activity. It will ultimately contribute to the community resilience.</p>
<p>3. Pro-climate integrated watershed management and climate change action plan integrated into regency development plan.</p>		
Policy Advocacy	<p>For this district-level policy advocacy will spend budget</p>	<p>The total regency budget to support climate change</p>

	Rp. 254,142,000 for the whole process.	adaptation in Indigenous People of Ammatoa Kajang allocated as the result of the policy advocacy is at least approximately Rp.1,725,000,000 / year. At the village level, the budget related to integrated watershed management will be about at least Rp. 70,000,000 per village / year with total budget from 14 villages is around Rp. 980,000,000.
4. The value of watershed and impacts of climate change are understood by local people.		
Awareness rising and information dissemination	The total cost for the component is Rp. 684.780.000	It is tangible value and benefit from the activities. It will contribute to the success of the project.

D. Describe how the project / programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

This project is consistent with national socio-economic priorities, national climate change priorities and national disaster risk management priorities.

Indonesia has a National and International obligation to adapt and mitigate climate change strategies in order to minimize the adverse effects of climate change and disasters. Indonesia, aside from being a developing country that is categorized as vulnerable to the adverse effects of climate change, has the right to receive funds from the Adaptation Fund. And, the proposed project location, as discussed in this proposal, is vulnerable to a number of factors of climate change and therefore local governments, village governments need to increase adaptive capacity to overcome the situation.

To anticipate the negative impacts of climate change, the Indonesian Government has carried out various climate change adaptation efforts, including the preparation of national policy documents to address the impacts of climate change, such as the Indonesia Adaptation Strategy (Bappenas, 2011), National Action Plan for Climate Change Adaptation (DNPI, 2011), Indonesia Climate Change Sectoral Road Map (Bappenas, 2010), National Action Plans Facing Climate Change (Ministry of Environment, 2007) and sectoral adaptation plans by Ministries / Agencies. A document on the Strategy for Mainstreaming Adaptation in National Development Planning (Bappenas, 2012) has also been prepared

The National Action Plan - Adaptation to Climate Change (RAN-API) in Indonesia has recognized the threats and adverse impacts of climate change and has identified the agricultural sector as a highly influenced sector. In addition, most rural populations, especially the poor, depend on agriculture and livestock for community livelihoods. Therefore, the Government of Indonesia through Nawacita has committed to implementing measures that will improve food security amid the ongoing climate change. Through the management of the Watershed (DAS) in an integrated way, it becomes an important part in accordance with the mandate of Government Regulation (PP) No. 37 of 2012, concerning integrated watershed-based approaches as a priority strategy in managing natural resources.

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

All activities designed in this project comply with all regulations, standards and procedures that apply at the national, provincial and district level. The overall objective of the project is in line with the national regulation of Forestry and Environment Ministry to the recommendations of the State Action Plan on Climate Change. The project will follow the rules of water and natural resources, environmental regulations related to agriculture, standards related to climate change adaptation. The proposed intervention will follow existing national technical standards, specifically related to watershed management, water use, agricultural land use management, laws on village autonomy, forest and environmental management, and planned activities for climate change adaptation

Apart from that the project would also adhere to the national scientific criteria with regard to adaptation such as economic, social and environmental benefit etc. several of the proposed project activities need further assessment toward any national technical standard regarding to environmental and social assessment.

All standards, procedures, and regulations related to project operations, which are relevant and can be identified are presented as the following table, If any other, further assessment will be applied.

Activity	Relevant national rules, regulations, standards and procedures	Compliance & procedure
Agroforestry	Regulation of the minister of forestry of the republic of Indonesia number p.20 / menhut-ii / 20 14 concerning general guidelines for	Design, planning, criteria of plants, cultivation system will be adjusted according to the regulation.

	development of forestry community forestry based on conservation		
	Bulukumba District Government Regulation No. 07 of 2008 concerning Management of Forests. This regulation supports the development of agroforestry agriculture outside protected forest areas to increase plant vegetation while allowing communities to meet their daily, medium-term and long-term needs.		
Integrated farming, system of rice intensification, gardening, yard banana planting.	Indonesia Law No. 22 2019 concerning Sustainable Agriculture Cultivation System	Agriculture cultivation planning, spatial and land use planning, seedling and nursery, planting, expenditure and importation of plants, seeds, seeds and animals, water use, protection and maintenance of agriculture, harvest and postharvest will follow criteria and standard set by those relevant regulations.	
	Indonesia Law No. 19 of 2013 concerning Farmer Protection and Empowerment.		
	Indonesia Law No. 18 of 2012 concerning Food. The purpose of this regulation; (a) increase the ability to produce food independently (b) provide a variety of foods and meet the requirements of safety, quality, and nutrition for public consumption; (c) realizing the level of Food sufficiency, especially Staple Food at a reasonable and affordable price in accordance with the needs of the community, (d) simplifying or increasing Food access for the community, especially people prone to Food and Nutrition.		
	Regional Regulation of the Regency of Bulukumba No. 4 2016 concerning Protection of Sustainable Food Agriculture land. The purpose of this regulation is; (a) protect the existence of food agriculture land and land in a sustainable manner; (b) ensuring the availability of agricultural land for food in a sustainable manner; (c) maintaining regional food independence and security and contributing to national food sovereignty; (d) protect the ownership of agricultural land owned by farmers; (e) increase the income and welfare of the farming community; (f) increasing the empowerment of farming communities; (g). preserve the environment.		
	Bulukumba Regency Regulation No.109 of 2016 concerning Technical Guidelines for Implementing Regional Regulation No.4 of 2016 concerning Protection of Sustainable Food Agricultural Land.		
	Minister of Agriculture of Republic of Indonesia Regulation No.31 / PERMENTAN / HM.130 / 8/2018 concerning early warning systems and handling the impacts of climate change on the agricultural sector.		The project will not use any chemical pesticide, instead it will promote bio-pesticide
	Regulation of Ministry of Agriculture of Republic of Indonesia No. 39 2015 concerning List of prohibited Active Pesticides and Limited Pesticides		

	<p>President of Republic of Indonesia Regulation No. 22 of 2009 concerning the Acceleration of Diversification of Food Consumption based on local resources.</p> <p>Government Regulation No. 17 of 2015 concerning food security and nutrition. This regulation emphasizes food diversification and improvement of community nutrition as well as food crisis preparedness and food crisis management;</p> <p>Minister of Agriculture Decree No. 08 / KPTS / RC.110 / J / 01/2017 concerning technical guidelines for optimizing the use of yard land through sustainable food restaurant areas. This regulation is intended to optimize the use of the yard through efforts to empower women to optimize the use of the yard as a source of food and family nutrition.</p> <p>Regulation of the Minister of Agriculture No. 102 / Permentan / OT.140 / 7/2014 concerning good Goat and Sheep Breeding Guidelines. This regulation is a guideline in the selection of broodstock, raising broodstock to postnatal care.</p> <p>Government Regulation No. 6 of 2013 concerning Farmer Empowerment. This regulation requires livestock farms that are integrated with agriculture</p>	<p>Utilization of house yards through this project will follow existing standards in order to produce adequate achievements for the fulfillment of family food sources by utilizing the potential of home yards.</p> <p>The process of selecting goat brooders will refer to this regulation. Goat breeders will be selected according to existing standards,. In carrying out integrative farming practices, it will follow the guidelines provided.</p>
Village Mid-term Development Planning (RPJMDes) Formulation.	<p>Law Number 06 of 2014 concerning Villages autonomy.</p> <p>Home affair ministry regulation No. 114 of 2014 concerning Village Development Guidelines.</p> <p>Regulation of the Minister of Villages, Development of Disadvantaged Areas, and Transmigration Number 17 of 2019 concerning General Guidelines for Development and Empowerment of Village Communities.</p> <p>Home affair ministry regulation 51/2007 concerning Community-Based Rural Area Development</p> <p>Regional Regulation of the Regency of Bulukumba No. 7 of 2016 concerning the Regional Medium Term Development Plan 2016-2021</p>	<p>The entire process of preparing the revised RPJMDes will follow the existing regulatory standards and procedures.</p> <p>The RPJMDes formulation will refer to the Bulukumba regency Regulation regarding the Regional Medium-Term Development Plan (RPJMD)</p>
Participatory Mapping	<p>Regulation no. 26/2007 concerning Spatial Planning</p> <p>UU no. 6/2014 concerning Villages autonomy</p> <p>PP 43/2014 article 123 concerning Village Development</p> <p>Home affair ministry regulation 45 of 2016 concerning Guidelines for Determination and Confirmation of Village Boundaries</p>	<p>The entire process and completion of Participatory Mapping will use standards in accordance with regulations of geospatial data making and usage.</p>

	Regional Regulation of Bulukumba Regency No.21 / 2012 concerning RTRW of Bulukumba Regency.	
	Geospatial Information Agency Regulation No. 3 of 2016 concerning Technical Specifications for Presentation of Village Maps	The standard of village map presentation will be adjusted according to regulations and standards.
Terasering demonstration plot for soil and water conservation	Indonesia Law 37 of 2014 concerning Soil and Water Conservation. This regulation aims; (a) protect the soil surface from falling rainwater, increase the infiltration capacity of the soil, and prevent surface runoff concentrations (b) guarantee the function of the land on the land to support community life (c) optimize the function of the land on the land to realize economic, social benefits , and the environment in a balanced and sustainable manner; (d) increase the carrying capacity of watersheds (e) increase the ability to develop capacity and empower community participation in a participatory manner (f) ensure the fair and equitable utilization of Land and Water Conservation for the benefit of the community.	Terraced demonstration plot for soil and water conservation Will follow the applicable standards adapted to this regulation, especially regarding soil conservation that can support agricultural cultivation in the upstream and middle stream of watershed.
	Regulation of the Minister of Agriculture No. .47 / Permentan / OT.140 / 10/2006 about the General Guidelines for Agricultural Cultivation in Mountainous Land. General Guidelines for Agricultural Cultivation in Mountainous Land are intended to provide an overview of good farming practices and appropriate landslide and erosion control techniques.	
	Minister of Forestry Regulation P.17 / Menhut-II / 2014 concerning Procedures for Community Empowerment in River Basin Management Activities.	This activity will be adjusted to the regulatory standards regarding community empowerment in encouraging watershed management through terracing practices to improve watershed.
Bio-mass stove, climate resilience women group	Regulation of the Minister of Environment and Forest P. 84 year 2016 about the climate village Program	The procedure of establishment of the group and the activity related to the climate adaptation will be aligned with the regulation.
Watershed management coordination forum establishment.	Regulation of the president of the republic of indonesia number 33 2011 on water resources management national policy	The process, criteria, and procedures of the forum establishment will follow the regulations.
	Law No. 17 2019 of Republic of Indonesia on Water Resources	

	Government regulation of the republic of indonesia number 37 2012 on Watershed management	
	South Sulawesi Province Regional Regulation No. 10 of 2015 concerning Watershed Management	
Farmer group empowerment and Field school	Minister of Agriculture Regulation No. 67 / PERMENTAN / SM.050 / 12/2016 concerning Farmer Institutional Development. This regulation is a technical guideline on increasing the capacity of farmers through coaching through farmer groups.	The farmer group and and field schools will refer to existing regulations. This regulation requires farmer groups to develop and to be effective in managing agriculture to build food security.
	Minister of Agriculture Regulation No.50 / Permentan / OT.140 / 5/2013 concerning Agricultural Field School Guidelines. A technical guideline in conducting agricultural field school activities to develop awareness and understanding of farmers in agricultural management.	
Climate resilience women group	Minister of Environment and Forestry Regulation No.P.31 / MENLHK / SETJEN / SET.1 / 5/2017 concerning guidelines on the Implementation of Gender Mainstreaming in the field of environment and forestry.	The process of forming women's groups, training to carrying out activities in the field of women will refer to existing standards. This is an effort in order to build understanding of women so they can adapt to the risks of climate change. It will also consider the gender equality aspect.
	Book of the Ministry of Women's Empowerment and Child Protection of the Republic of Indonesia; general guidelines for adaptation to climate change that are gender responsive (2015). this guideline provides direction to improve understanding of gender mainstreaming in relation to the impacts of climate change, as a practical guideline for cross-sectoral coordination and integration of similar adaptation action programs, and directing adaptation action programs as an effort to realize gender responsive development and the accompanying impacts.	
Integrated watershed management document	Indonesian Minister of Forestry Regulation No. P.39 / MENHUT-II / 2009 concerning Guidance for Preparation of Integrated Watershed Management Plans. This regulation is a general framework in making integrated watershed management plan documents at the regional level	Making an integrated watershed management document will refer to existing regulations as reference material for the study for the document drafting team. The compliance of this regulation is very important as a basis so that the watershed management documents that are made do not contradict the higher level regulations.
	Indonesian Minister of Forestry Regulation No: P.42 / Menhut-II / 2009 concerning general patterns, criteria and standards for integrated watershed management. A guide in establishing integrated watershed management standards in certain watersheds	
	Republic of Indonesia's Forestry Minister's Regulation No: P.60 / Menhut-II / 2013 concerning the procedures for preparing and determining watershed management plans. The principle of this regulation is (a)	

	<p>watershed management is carried out intact from upstream, middle to downstream. (b) implemented in an integrated manner as an ecosystem, a plan and a management system; (c) involving stakeholders, coordinated, comprehensive and sustainable; (d). adaptive to changes in the socio-economic conditions of a dynamic community and watershed characteristics; (e) equitable distribution of tasks, functions, costs and benefits among stakeholders.</p> <p>South Sulawesi Regional Regulation No.10 of 2015 concerning watershed management.</p>	
Climate Change Adaptation Action Plan Formulation.	<p>National Climate Change Adaptation Plan of Action (RAN-API). This document is a general guideline in preparing regional national climate change adaptation action plans.</p> <p>Indonesian Minister of Environment and Forestry Regulation No. P.33 / Menlhk / Setjen / Kum.1 / 3/2016 concerning Guidelines for the Preparation of Climate Change Adaptation Action. This regulation is a technical guideline for preparing climate change adaptation action plans for stakeholders in making policies.</p> <p>Regulation of the Minister of Environment of the Republic of Indonesia Forestry Fund No. P.7 / MENLHK / SETJEN / KUM.1 / 2/2018 concerning Guidelines for Assessing Vulnerability, Risks and Impacts of Climate Change. A guideline for conducting studies and risks in each watershed that is affected by climate change.</p>	<p>Dalam proses penyusunan dokumen rencana aksi adaptasi perubahan iklim di tiga DAS akan mengacu pada peraturan ini mulai dari proses kajian hingga penyusunan dokumen. Dalam proses kajian akan dikaitkan dengan temuan-temuan lapangan untuk disinergikan.</p>
Integrated Watershed Management Forum	<p>Republic of Indonesia Government Regulation No. 37 of 2012 concerning watershed management</p> <p>Minister of Forestry Regulation No. P.61 / Menhut-II / 2013 concerning Watershed Management Coordination Forums. This regulation is intended to provide general direction in the establishment of DAS Forums at the National, Provincial and Regency / City levels.</p>	<p>The establishment of an integrated watershed management forum in this project will refer to this regulation from the pre-implementation, the implementation process to the evaluation.</p>
Adoption of rural appropriate technology	<p>Regulation of the Minister of Villages, Development of Underdeveloped Regions, and Transmigration RI No. 23 of 2017 concerning the development and Application of Appropriate Technology in the management of village natural resources. The use of agricultural technology has been adapted to the needs of the community, can answer the problems of the community, does not damage the environment, can be utilized and maintained by the community easily, and</p>	<p>All project activities that will be carried out in the agriculture sector will follow existing regulatory standards for economic and environmental sustainability in rural areas. The technology used as much as possible can be used easily by the target community of the project target village.</p>

	generate added value from economic aspects and environmental aspects.	
	Bulukumba Regency Regulation No.20 2019 regarding technical guidelines for the development and application of appropriate technology in the management of village natural resources. The objectives of the regulation are (a) to realize the utilization of natural resources that guarantee intergenerational and intergenerational justice, (b) to realize equitable community welfare based on the principle of togetherness to prevent economic disparity, social and cultural conflict; (c) realizing the protection of the functions of natural resources; (d) realizing legal protection for the village community in the management of village natural resources	

F. Describe if there is duplication of project / programme with other funding sources, if any.

In general, there has not been yet any funding resources working at similar issue at the area at this the same time of proposed project.

There has been a program related to climate change adaptation run inside the area of the watershed called 'Program Kampung Iklim' or Climate Village Programme is ongoing programme from Bulukumba's government handled by Bulukumba Environment and Forestry Agency is. This program aim to enhance awareness about climate change to take adaptation and mitigation actions in structural way. In Bulukumba there are two villages that established as 'Climate Village' that located in upper land. This programme will be spread to other villages to support mission of Bulukumba government to establish the five community groups to manage the Climate Village named 'Kampung Iklim'. As the initiative, government has launched Climate Village Forum as a space to discuss and coordinate about mitigation of climate change.

However the program is designed in form of the contest, so the village set as climate village in order to participate on national contest of climate village. Consequently, in several part of the program is not touching the substansial part of effort on climate adaptation. For example there were several activities only done for the contest examination only.

Besides there have been several projects/programs can be identified and provide some lesson learn, the projects presented on the table below:

Project Name	Entity	Duration	Description	In line with proposed project
'Watershed management for enhancing local livelihoods and biodiversity conservation in Indonesia'	USAID/ CIFOR/ OASE/ Balang Institute	1 November 2015-31 October 2018	The project was implemented through the Participatory Action Research approach and principles in the Raowa watershed of the Kajang customary	Projects in the Kajang customary area focus on the formulation and enactment of district regulations on empowerment of the Kajang

			<p>area of Bulukumba Regency and Tangnga Watershed in Bantaeng Regency to develop watershed management.</p> <ol style="list-style-type: none"> 1. An integrated approach to management of land and water resources that is still limited is adopted at the local level due to inadequate guidelines and ineffective institutional arrangements; 2. Endangered biodiversity and watershed hydrological functions due to management at the landscape level that does not support each other, resulting in reduced flora and fauna species which are important to food sources for local communities; 3. Incomplete policy and regulatory framework supports integrated watershed-based management. 	<p>customary community through multi-sector. This empowerment policy will make it easier to encourage and build community strengthening participation in climate change adaptation.</p>
<p>Reforestation of land by planting mangroves along the Raowa River in the region of Possitana village in Kajang sub-district</p>	<p>Department of the Environment and Forestry of Bulukumba Regency</p>	<p>2018</p>	<p>Efforts to mitigate carbon emissions and efforts to replace the construction of concrete dike infrastructure and fish breeding efforts in the Raowa river that are accessed by the local community</p>	<p>The project was carried out in the Kajang customary area with ideas born from program activities of the regency regulations on empowering the Kajang customary community.</p>
<p>Agroforestry and Forest (AgFor)</p>	<p>Canada/ CIFOR/ ICRAF/ Balang Institute</p>	<p>2012 - 2015</p>	<p>Implement institutional and land governance systems through 3 components: the component of regulatory and institutional governance, livelihoods and</p>	<p>Interventions in this project in the development of agroforestry and multi-stakeholder participatory, will facilitate climate change adaptation projects to encourage</p>

			marketing. In the Kajang customary area the agroforestry system was implemented around the customary forest area by ICRAF and the making of regional regulation (PERDA) No.09 2015 concerning Strengthening Rights, Recognition of Rights and Protection of the Rights of the Customary Law Community of Ammatoa Kajang	participation from the district and village government levels to carry out adaptation practices in 3 watersheds in the Kajang customary areas and will also make it easier for the government to make regulations at the district and village level because there is prior experience.
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Previous identified projects that has been developed through a multi-stakeholder participation approach in making regulations and involving both district and village communities and government will make it easier to encourage the the Kajang customary community to adapt to climate change through the Climate Change Adaptation project.

The multi-stakeholder participatory approach will also be the main approach and principle to be carried out in the climate change adaptation project in the Kajang customary area. the success of the multi-stakeholder approach is the lesson learn from the previous project at the area.

And The proposed programme to Adaptation Fund is designed to support, enhance and will complementary government initiative above. When government established two villages as Climate Village at Upper land, this proposed program will strengthen resilience of communities from climate change impacts at 14 villages within customary area.

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

The transfer of knowledge generated through this project is very important because it will take into account current and future climate change scenarios. These projects are expected to produce important learning in terms of building a shared understanding of land use that is adaptive to climate change.

In order to focus on concrete adaptation activities, however, this policy and policy linkages, and will work with other projects and initiatives to disseminate information as effectively as possible. The project will generate / record and disseminate explicitly as well as tacit knowledge. Explicit knowledge will be generated and shared with different stakeholders during meetings, workshops and / or through publications. Tactical knowledge (learning generated through implementation experience) will be documented in the shape of the process learning document for sharing / publication.

This program recognizes the importance of learning and knowledge management. During and after the program, some knowledge management will be provided; (1), Gathering basic information about the vulnerability of the climate change context in 3 watersheds in the Ammatoa Kajang Indigenous People area and the results will be disseminated through brief reports to the government and the community. (2). Make infographics and videography for public audiences. (3) FGD activities, public consultations, workshops are part of learning for village governments and communities in 36 villages that have also involved as stakeholders. At the district government level (4), workshops and public consultations will be disseminated through websites, newspapers local and local radio in Bulukumba district (5) dissemination of knowledge and awareness raising through publication.

All the knowledge management and lesson learned component will be arrange in Bahasa Indonesia as all the stakeholder in the region including involved including the indigenous people of Ammatoa Kajang know Bahasa Indonesia, and it will be more effective using Bahasa rather than local language; therefore, using Bahasa for the learning and knowledge sharing should be enough.

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

During consultation, it has been identified the key stakeholders that can support the project. the key figures include; Ammatoa as the customary head of Ammatoa Kajang Indigenous People, village head who is also a Galla 'or traditional leader, women group farmer group at the project target villages.

The consultation process was carried out in various ways such as direct interviews, FGDs and mini workshops. This consultation was carried out to identify the interests of each beneficiary, thus it could be optimally accommodated in project implementation. Especially the traditional leaders, women's groups, and farmer groups who feel the climate change directly affects their livelihoods. In addition, this consultation also considers vulnerable groups or families who will be involved in this project.

At the district level, mapping of the relevant government offices) was also the main target in this project collaboration. The offices mapping is important to understand the views and get feedback from because they are the policy makers at the district level. They are the potential stakeholders who should be be invited to work together. the consultation that have been carried out can be seen in the following table:

Table of Stakeholders Consultation

Consulted party	Consultation process & Issue raised	Time	Location
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<p>The village heads of Tanah Towa and Lembanna</p>	<p>Consultation with the village heads of Tanah Towa and Lembanna Village through direct interview to discuss the situation in Kajang. As the village government, there is a lot of information about the water crisis, erratic weather, crop failures faced by the community and the process of land use change in the Ammatoa Kajang Indigenous Peoples there have also discussed the possibility of applying for adaptation project funding to overcome these problems.</p>	<p>17 December 2018</p>	<p>Tanah Towa village office</p>
<p>Head of village of project target villages.</p>	<p>A mini workshop was held in Tanah Towa Village discussing the potential and problems of the upstream, middle stream and downstream of watersheds.</p> <p>The mini workshop discussed the potential and problems of land and water use in 3 watersheds (Raowa, Apparang and Baonto). These three watersheds depend on customary forests with an area of 313.99 which is upstream for the Raowa watershed and water supply suppliers for the Apparang and Baonto watersheds.</p> <p>These three watershed areas are paddy field where experiencing irrigation difficulties in the dry season and flooding in the rainy season. This difficulty has an impact on the crisis of clean water and water for rice fields. In addition to the problem of water crisis and flooding there has also been intrusion of sea water in the Raowa river along 7km from the coast to the river. Solution to overcome the water crisis through the wellbore and</p>	<p>9 Mei 2020</p>	<p>Tanah Towa village office</p>

	<p>pipeline program by the village government and the Water Resources Management Agency of Bulukumba Regency. However, the pipeline program is not effective because the piped water source has been experiencing a drought since 2012.</p> <p>In the mini workshop became an important meeting for the village government to build collaborative actions to design integrated development in overcoming watershed problems.</p> <p>The Head of the Malleleng village gave his opinion in the mini workshop forum stated the situation of floods in the rainy season, water crisis in the dry season and sea water intrusion within the watershed area, especially in the Raowa watershed, which requires joint handling among villages to make village-oriented planning on watershed rehabilitation.</p> <p>The suggestion from the village head of Malleleng was responded well by the other village governments as well as several related agencies that were present in the mini workshop.</p>		
Kajang Sub-district government officer	<p>Consultations with the Kajang sub-district government provided a lot of information about the situation of the villages in the Ammatoa Kajang area. from the results of the consultation raised the issue of difficulties of Ammatoa Kajang faced during the dry season. In the dry season there are many people who buy water for household clean water needs. This reinforces previous findings</p>	18 December 2018	Kajang sub-district office

	regarding the amount of money people spend to buy clean water.		
Department of the Environment and Forestry of Bulukumba regency	<p>Consultation through direct interviews with the head of the Department of Environment and Forestry provided information about the worsening watershed conditions in Kajang. From the results of this consultation, data and information were obtained about the dry paddy fields that had been turned into fishponds but remained unproductive. This lack of productivity is also influenced by the lack of public knowledge about pond management and the loss of mangrove forests due to the embankment development program as an effort to stem the overflow of the Raowa River during the rain. However, this embankment was not able to last long because the soil base on the river bank was of soft type and easily made the embankment collapsed. Therefore, this service provided a mangrove planting program along the Raowa river in Possi Tana Village and Lembanna Village in 2018 to restore mangrove ecology. dykes and also as a breeding ground for the Raowa river water fish as a source of economic livelihood for some villagers. He really appreciated the collaborative work as the head of the office who is fully involved in activities to support indigenous peoples, forestry and the environment by previous programs and subsequent collaborative programs.</p>	19 December 2018	Bulukumba Regency's Office of the Environment and Forestry

<p>Water Resources Management Agency of Bulukumba Regency</p>	<p>From this consultation obtained information about the difficulty of clean water caused by the reduction of trees in the upstream area. at the upstream there are many changes in cropping patterns that were once long-term plants converted to short-term crops. This change affect the decrease in water debit which has an impact on the clean water crisis in the downstream region. There have been many pipeline development programs but this program has always failed because the water in the dry season in the watershed area is experiencing drought. The Head of Office agreed for the collaborative program could overcome the watershed problem.</p>	<p>4 Mei 2020</p>	<p>Bulukumba Regency water resources management office</p>
<p>Development Planning Agency of Bulukumba Regency</p>	<p>Consultation with the Head of Development Planning Agency of Bulukumba Regency regarding building synergy between the District-level offices in dealing with conditions in the Ammatoa Kajang Customary Area. the issue raised was that the government offices in Bulukumba regency work separately. There is no planning scheme so that the activities of each offices do not support each other. There is the importance of how to make a development planning scheme that can bind all parties thus the programs of government offices can support the improvement of watershed management in the Kajang customary.</p>	<p>4 Mei 2020</p>	<p>Development Planning Agency of Bulukumba Regency office.</p>

	<p>From the results of this consultation, we also got a information that each offices related to the project can at least allocate budget 5% of the annual budget to support the livelihood of the Ammatoa Kajang indigenous community toward climate change.</p>		
<p>Bulukumba Regency Agriculture department</p>	<p>Based on the results of consultations with the Department of Agriculture of the Regency of Bulukumba, we got information that the livelihoods in the Ammatoa Kajang customary area including the 3 watersheds need special attention. Rice fields always experience drought due to lack of water that can be used for agricultural irrigation. From the results of this consultation get a concept about developing agricultural models to strengthen community livelihoods. In addition, also information about the topic of integration between agriculture and animal husbandry.</p>	<p>5 Mei 2020</p>	<p>Bulukumba Regency Agriculture department office.</p>
<p>Office of Villagers and Village Government Empowerment</p>	<p>Consultation with this office to try to develop a concept of development planning that is adaptive to climate change starts from the village level.</p> <p>From the results of this consultation, we got</p>	<p>7 Mei 2020</p>	<p>Office of Villagers and Village Government Empowerment</p>

	<p>information that none of the villages in Bulukumba district have integrated adaptive development plan for climate change. The village medium term development plan as a guideline for development at the village level is only physical development. From this consultation, it is also possible to revise the village medium term development plan in the project target villages.</p>		
<p>Food Security Office of Bulukumba Regency</p>	<p>From the results of consultations with the food security office in Bulukumba district, the issue raised has been that the institutions of farmer groups in the village must be strengthened. In addition to the information above, we also discussed the topic of how to form a group of women who can utilize the yard land around the house for vegetable crops so that expenses for each household can be minimized.</p>	<p>8 Mei 2020</p>	<p>Office of Food Security Office of Bulukumba Regency</p>
<p>Vice head of Bulukumba Regency</p>	<p>From this discussion, we obtained information that in Bulukumba there are no yet district-level policies that can support and strengthen communities in adapting to climate change. The vice head can fully support collaborative work to support climate change adaptation in these 3 watersheds.</p>	<p>27 December 2018</p>	<p>Regency Head office.</p>

<p>Women Group of target villages</p>	<p>FGD with women's groups in villages around the customary Ammatoa Kajang area, raised issue on the household income problems currently faced by families in the area, some related to water issues for household needs and water for agriculture. As a result there are many young people and their husbands migrating to Southeast Sulawesi to make a living. The absence of a husband and child has made women change their husbands' roles to do work that is often done by their husbands.</p> <p>Another additional problem found in the interview in Pattiroang Village was that the price of liquid gas for cooking continued to increase and burden the family economy.</p>	<p>20 December 2018</p>	<p>Pattiroang dan Tanah towa villave hall.</p>
<p>Farmer group</p>	<p>FGD with farmers in the middle stream and downstream area of watershed inside the Ammatoa kajang customary area raised the issue of water for agriculture, it has affected the agriculture income. Regarding the conditions of agriculture problem, the farmer group hopes that there are steps taken by the government in order to overcome the Kajang customary community problem.</p>	<p>9 Mei 2020</p>	<p>Pattiroang village</p>
<p>Ammatoa Kajang (Chief of Indigenous</p>	<p>Ammatoa wants all the programs that will enter the customary area to help the</p>	<p>10 Mei 2020</p>	<p>House of Ammatoa Kajang (Tanah Towa village)</p>

<p>People of Ammatoa Kajang)</p>	<p>indigenous community in the agricultural sector so that the community does not encroach on the customary forest area. In addition, we obtain information that currently, thousands of indigenous people from the Kajang area have been out looking for work for household needs. It is due to the population of the Kajang customary community is increasing, while the land do not increase. There was also an information that lately, in the customary areas of Kajang is rather difficult to predict the rainy season.</p>		
<p>Galla Lombo '(Customary leader)</p>	<p>Consultation with Galla Lombo regarding the condition of the Ammatoa Kajang indigenous people. From the consultation it is identified that much has changed at this time related to agriculture. In the past, rice crop failure never occurred due to lack of water. Now in turn of second crop, surely many will fail to harvest. This situation make eventually many people change the plant from rubber to pepper, from cloves to other plants.</p>	<p>10 Mei 2020</p>	<p>House of Galla Lombo (Tanah Towa village)</p>
<p>Department of Environment and Forestry Bulukumba Regency.</p>	<p>The consultation was the second time with the office conducted to synergize with the adaptation fund project with the Bulukumba district environmental and forestry service program.</p>	<p>6 Mei 2020</p>	<p>Office of Department of Environment and Forestry Bulukumba Regency.</p>

	<p>From this consultation, information was obtained that the environment and forestry service had climate village programs in several villages in Bulukumba Regency.</p> <p>The climate village program is the program to increase community understanding climate change.</p> <p>The head of the department of environment and forestry hopes that this project can be synergized with the district program that is already running so that they can help each other to enhance climate change mitigation and adaptation in Bulukumba Regency.</p>		
<p>Vice Head of Bulukumba Regency</p>	<p>This consultation was the second round with the vice head of Bulukumba Regency to strengthen the commitment on the proposed project. In this consultation the vice head wanted the adaptation fund project to help the district government in handling the environmental crisis that was happening in the customary area of Ammatoa Kajang.</p> <p>Development policies must be synchronized from the village level to the district level.</p> <p>From this consultation we also learned that in Bulukumba district there has not been a massive</p>	<p>11 Mei 2020</p>	<p>Regency Head Office</p>

	<p>campaign on climate change. Society and government sometimes do not want to bother with climate change. Therefore, the project expected can educate people by directly do livelihood adaptation. Then at the government level, it can provide policy support.</p>		
<p>Forestry Office Branch Area VIII (Bulukumba Regency, Sinjai Regency, And Selayar Regency)</p>	<p>The issue raised was the importance of climate change adaptation in the Ammatoa Kajang customary area. As the person responsible for protecting the Ammatoa Kajang customary forest through the government structure, the government hopes that this project can protect the Ammatoa Kajang customary forest area.</p> <p>The agroforestry will provide protection to customary forest areas by planting timber and other productive crops. Timber planted through agroforestry schemes will meet the community's need for timber so that it does not encroach on customary forest areas. In addition, it also enriches plant vegetation to help absorb water into the soil.</p> <p>Then to maintain soil erosion on sloping lands, it is important to conserve soil and water using terraces. The purpose of this terracing is to hold the water and soil so that the soil in the rainy</p>	<p>11 Mei 2020</p>	<p>Office of Forestry Office Branch Area VIII at Bulukumba</p>

	season is not washed away by water and creates sedimentation in the lower reaches of the river.		
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During the consultation process with the Regency offices and Vice Head of Bulukumba Regency raised the strategic issue about integrated watershed management and climate change adaptation actions in the Ammatoa Kajang customary area which covers three watersheds; Raowa, Apparang and Baonto. Integrated watershed management models and climate change adaptation actions in the three watersheds will be jointly designed. Then it will proceed to the formulating Bulukumba District Government regulation that will bind and the parties on the integrated watershed management and climate change adaptation actions in the three watersheds.

Integrated watershed management and climate change adaptation actions in three watersheds will have implications to the improvement of the 3 watershed, and also will contribute to the community economic income. it will involving stakeholders at the regional level (district government, sub-district government and village government) to collaborate and synergize the program.



Gambar: konsultasi Dinas Lingkungan Hidup dan Kehutanan, Kepala BAPPEDA, Wakil Bupati Bulukumba

Then during consultations with the village government issues were raised about the water crisis, land use, the village medium term development plan, it is identified that the village government was never involved in watershed management.

In this consultation also raised the issue of community livelihood strategies in dealing with climate change. Strengthening community institutional systems to reduce risks to the social, economic and environmental climate. Building diverse livelihood management models so that communities have choices that can improve the family economy. The livelihood adaptation model approach is needed by the community.



Gambar; Mini workshop head of villages

Consultation with the Head of the Forestry Service Branch of Region VIII (Bulukumba, Sinjai and Selayar Districts) raised an issue regarding the district level watershed management forum. This watershed management forum will develop an integrated watershed management model. Integrated watershed management can only be done with a multi-stakeholder participatory approach. The office propose to promote agriculture agroforestry systems. The Agroforestry system will benefit at two aspects: helping to restore the environment and help the community's economy. The agroforestry system enriches the types of plants, so that when one crop fails there are other plants that community can harvest.



Consultation with women's groups, farmer groups, traditional community leaders and traditional leaders is to understand the impacts of climate change felt by women and farmers. The results obtained from the consultation are the importance of agriculture that can adapt to climate change. This is because the impact of climate change in the three watershed areas has been greatly felt by the community such as water crisis, crop failure and flooding. Broadly the project design has been based on those abovementioned consultation. Can be seen from the all component of the project is in line with all the consultation result.



Farmers group and women group consultation

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

In the adaptation perspective the implementation of proposed project will focusing on enhancing resilience and reducing vulnerability. This aim will be achieved through improving capacity of the community by advancing economic resilience of the household, and improving capacity toward climate related risk and hazards.

The absence of the intervention of the project, it can be clearly stated that the community surrounding Indigenous People of Ammatoa Kajang customary area will continuously suffering from severe impact of disasters related to climate change, namely flood, extreme drought, and sea water intrusion. The economic lost can reach IDR. 98,610,000,000 (US\$. 7,043,571). Besides, the environmental damage will be worsened if the circumstances persist.

the policy advocacy aspect of the project will ensure the sustainability of the approach, especially the watershed management approach for adaptation to climate change.

Below is the scenario and justification why the proposed project intervention become important.

Component	Baseline (without AF)	Additionality (with AF)
<p>Outcome 1: Management and governance of three watersheds inside the Indigenous People of Ammatoa customary area improved.</p>	<p>The environmental supporting capacity of the watershed inside the Ammatoa Kajang Indigenous People area keep decreasing, causing disasters that triggered by climate change, such as flood, extreme drought, and sea water intrusion. These events have caused a huge lost to the community.</p>	<p>The lost from the climate risk disasters reduced, the number of peoples affected by disasters significantly reduced, the frequency of the disasters reduced.</p>
<p>Outcome 2: Resilience of people in Indigenous people of Ammatoa Kajang customary area enhanced and vulnerability to climate risk reduced</p>	<p>Number of people affected by climate related disasters keep increasing, the economic lost increase every year. There have been around IDR. 98,610,000,000 (US\$. 7,043,571) lost every year recently at the Indigenous People of Ammatoa Kajang area.</p>	<p>decreasing on the number of people affected by climate change related disasters. The huge economic lost can be saved every year at the Ammatoa Kajang Indigenous People Area.</p>
<p>Outcome3: Pro-climate integrated watershed management and climate change action plan integrated into regency development plan.</p>	<p>The impact of climate change to the vulnerable community like Indigenous People of Ammatoa Kajang worsen because no commitment from the government to address the problem.</p>	<p>The impact of climate change can be reduced by increasing resilience of vulnerable community as the result of the government effort to address the issues, by putting them on policy and budgeting</p>
<p>Outcome 4: The value of watershed and impacts of climate change are understood by local people.</p>	<p>Lack of the knowledge of local community regarding to the value of watershed and climate change issue.</p>	<p>With the adequate knowledge and information on the issue of the watershed value and climate change and its impact will enlarge the likely of the community to take action on the climate adaptation, and to support any initiative related to the issues.</p>

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

During designing of the project, taking views of different stakeholders consulted in different phases of proposal development, sustainability parameters are taken in to account. Sustainability of the project outcomes, beyond the life of the project is ensured through different strategies that are

proposed in this project. The strategies, to be taken up (as discussed in this proposal) focus on different sustainability parameters and it is assumed to be achieved through participatory and community ownership approach. Capital investments, to be incurred under the project will have revenue generating options for its sustenance. The community infrastructures will be managed and maintained by the community, once they realize the benefits of the initiatives. For sustainability, the project will take two prong approach, i.e., sustenance of the process by the community, realizing the benefits of adaptation measures and secondly, accessing resources from Government and other agencies, under different schemes / programme and managing / maintaining the project outcome and building upon it further.

Further, study reveals that long term sustainability of the watershed program can be achieved if there is improvement in the level of income of the beneficiaries. The dynamic model developed by the authors show that it is possible to achieve this if the watershed can generate a profit over its lifespan of the net present value. Study further emphasizes the importance of comprehensive approach of watershed development for its long term sustainability and significant impacts on the society . Examining contextually, the proposed intervention will sustain for a longer period as it is going to benefit the target mass, both directly and indirectly, supporting them enhancing their income. Apart from that, as the strategy to be adopted is comprehensive and integrated, it can be safely said that project will sustain after its life. However, sustainability parameters of the project and key elements that would contribute towards sustainability of project outcomes are discussed below.

Regarding to the sustainability issue related to the policy advocacy; There has been an experience of the role of the Bulukumba regency government participation and support for and advocacy issue. The advocacy for formulating regulation of recognition and protection and empowerment of the Ammatoa Kajang customary community was the experience that showed how the Bulukumba Regency government has been very supportive. It can be the precedence that there will be no delay on the policy or the policy will not be approved.

Based on experience through previous projects in making participatory regulations such as PERDA No. 09/2015 concerning P3MHA Kajang and PERBUP No. 40/2018 concerning Empowerment of the Kajang

In addition to regulatory interventions at the district level, interventions at the village level to create a Village Mid-Term Development Plan (RPJMDes) based on Village Law No. 6 of 2014 will also ensure that at the event that the regency policy is delayed the project sustainability still can be achieved. Recently the village government have the autonomy to plan and execute its own village development planning. By integrating the integrated watershed management and climate adaptation perspective into the village development planning will ensure the project goal and sustainability still can be achieved even if the district policy has not been applied yet.

Environmental Sustainability

Project activities will improve watersheds to be more resilient and adaptive to climate change. When the watershed improved through sustainable governance the environmental support

capacity of the watershed will sustain. Carbon sequestration through agroforestry models and tree planting on critical land will have a positive impact and sustainable source of ecosystem services for the community. The land and water conservation system in the upstream watershed through terracing, infiltration wells and bio-pores will help not only to hold back the flow of water but also minimize the discharge of water into the river during the rainy season to reduce flooding.

The agroforestry system that will be implemented in the upstream area of the watershed will help minimize the dependence of the community on customary forests that are only 313.99 to support eco-system services in indigenous areas covering an area of 22,592.87 ha. Technological inputs other than agroforestry such as terracing, infiltration wells and bio-pore systems will help communities overcome the effects of floods and water crises that they experience throughout the year.

Social & Institutional Sustainability

Social and Institutional sustainability, revolves around the community living in the watershed and their institutions / organizations. From the inception of the project, these communities have been involved, events in the design stage, as discussed earlier. As the project aims to build an institutional / organizational capacity for climate change situations and ensure their involvement in different stages of implementation, it can be assumed that initiated processes will be continued by the communities. Apart from this, for institutional sustainability, there will be resource generation and management strategies that will help the institution to grow longer and sustain the process.

The design, implementation and monitoring of the project will involve community-based organizations such as farmer groups, women's groups, etc. Not only the involvement of groups at the community level but also the involvement of village government as the smallest State institution in the village that will participate in the project planning, implementation and monitoring process. A number of steps were also taken by involving the Regency offices Bulukumba Regency to be involved in making climate change adaptation documents, regency regulations, village land use planning to facilitate learning and information sharing between each other. This is part of a strategy to facilitate communication and implementation for sustainability after the project ends.

Economic and Financial Sustainability

This project will strengthen livelihoods and sources of income for vulnerable communities in 14 villages. As an agreement and their commitment to carry out natural resource management plans as actions to reduce the impact of disasters / climate risks and strengthen their economic resilience to the effects of climate change. Groups of women and groups of men will get assistance from this program to develop their sources of income and environmentally friendly welfare.

Funds will be used for women's groups in 14 villages by making a home garden and compost from household waste. This can be seen in the outcome of activities in 2.2 and 2.3. managing a home garden will help the community to save for buying vegetables that they often do in traditional

markets in the Kajang customary area. This will also help fulfill public health nutrition to be resistant to weather changes that occur due to the effects of climate change.

In outcome 2.4 biomass stoves will be held to help the economy of the community to meet their kitchen needs in cooking. The use of eco-friendly and economical bio-mass stoves will help people, especially women, from dependency on using petroleum gas that cost at a price of Rp. 20,000 per tube.

Agriculture integrated with animal livestock will be carried out by procuring goats for poor groups. This will be an alternative income as a result of crop failures due to droughts and floods that occur every year in the Ammatoa Kajang Indigenous People customary region.

The sustainability of the project beyond the project life has been anticipated; through the economic and social sustainability aspect with the economic benefit of the project to the community. Other sustainability factor has been the policy support of Bulukumba regency government. In the case of the project fail to advocate the policy; the sustainability of the project still can be ensured through emphasize on the village government and village development planning. The policy on village development planning and village autonomy have been exist, so it can be used to support the achievement of the project outcome.

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

This project does not have a significant environmental and social impact, therefore it is categorized as **Category C** based on OPG (Operational Policies and Guidelines) Annex 3-Environmental and Social Policy.

Some categories that have low impact are related to the principles of C, where all kinds of complaints mechanisms will be prepared through a series of meetings to accommodate complaints.

During the project term we will set the complaint mechanism in which community members may always voice concerns to the project, their local leader and government agency representatives. In addition, project will publicly posted instructions in Bahasa Indonesia and local languages as appropriate (e.g., Bahasa Konjo) directing people to voice complaints.

With the mechanism any complaint or grievance would immediately consult to IE team leader and appropriate government authority, at a minimum. Grievances raised will be communicated to the IE Team within 15 days, together with a proposed response.

The project will post information about the project at the community public places and will share any relevant information at all public meetings.

Complaints regarding projects/programmes supported by the Fund can also be filed with the secretariat at the following address:

Adaptation Fund Board secretariat Mail stop: MSN P-4-400
1818 H Street NW

The following explains the potential impacts and risks to the various outputs of program activities:

Project output and identification of trigger for social and environmental impacts

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

Principle 1. Compliance with Law

This project on the implementation will be ensure to comply all the relevant policy, regulation and law, they have been identified as follows::

1. LHK Regulation No.P.33 of 2016 concerning Guidelines for Preparing an Action Plan for Adapting to Climate Change. In implementing this project referring to Law No. #6 2014 concerning Villages. This project is also follow the Law No.26 of 2007 concerning Spatial Planning.
2. Government Regulation (PP) No.37 of 2012, concerning integrated watershed managemen
3. To support the protection and empowerment of MHA Ammatoa Kajang along with rights to its territory including customary forests. This project will refer to the local legal product, PERDA N0. 09 of 2015 and PERBUP No. 40 of 2018 concerning Empowerment of Ammatoa Kajang Indigenous People.
4. And law products from the Ministry of Environment and Forestry concerning the establishment of Kajang customary forests with SK numbers. 6746 / MLHK-PSKL / KUN.1 / 12/2016,
5. Minister of Environment and Forestry Regulation No. 7 2018 on Guidelines for Vulnerability, risk, and climate change impact study,
6. Technical Guidelines for Preparing Action Plans for the Sustainable Development Goals of the Ministry of National Development Planning / Bappenas in 2017,

7. Minister of Environment and Forestry Regulation No.33 of 2016 on Guidelines for Preparing Climate Change Adaptation Actions, Directorate General of Natural Resources
8. and Ecosystem Conservation Regulation No.6 on Appropriate conservation partnership technical guidelines Regulation. Directorate General of Natural Resources and Ecosystem Conservation Regulation No.12 of 2015 on Guidelines for Procedures for Planting and Enriching Types in the Framework of Restoration of Mainland Ecosystems in Natural Reserve Areas and Nature Conservation Areas.

Therefore, no risks or negative impacts are identified regarding compliance with law.

Principle 2. Access and Equity

This project is designed with social inclusion principles. There will be no the impact of the project that limit access to basic health services, clean water and sanitation, energy, education, housing, safe and proper working conditions and land rights to any of social group. The project also avoid to exacerbate existing injustices, especially to marginalized or vulnerable groups. The project has been designed in a way that would not impede the access of any group to the services and important rights mentioned in the Principle so that it does not require any further assessment on compliance.

Principle 3: Marginal and Vulnerable Groups

The project is basically aimed at providing opportunity to marginalized community living in the programme area participation in decision making processes in development schemes as well as to enhance their livelihood and income and as such will not have any adverse impact on other marginalized and vulnerable groups. Therefore it does not required further assessment.

Principle 4: Human Rights

At the most part of the project, it does not foresee any violation of human rights. The human rights concern will be recognized during project operations, including design, implementation, monitoring and evaluation, regarding the Universal Declaration of Human Rights as the overall principle of project. However there is possibility for human right violation on circumcision practice at project target location in which the project will support the economic element of the household, there is possibility that the project will support the practice indirectly to mitigate the problem. It has been done an assessment and study on the circumcision practice, it is found that the female genital mutilation is no longer exist, it has been change with only symbolic ritual, no more female genital mutilation practice. It will also ensure that the project will not deliver any project economic benefit to the existence of the practice by doing screening to that issue. Therefore this is categorized as low impact and risk.

Principle 5: Gender Equality and Women’s Empowerment

This project conducting gender based activity to enhance participation of all gender to contribute

Targets have been set for coverage of women in all the project’s interventions related to training and other capacity building activities. This will ensure that women will have equal access to information and acquisition of skills under the project. the gender assessment show that there is still inequality of man and woman in both quantitatively and qualitatively that bound socially and culturally to the community at the project target location, and there is still possibility the project will maintain the existing the inequality.

Mitigation:

The project design have emphasized on the equal opportunities to get benefit from the project for all groups including women and men. With participatory way, using gender analysis and gender stakeholder consultation the project will ensure the involvement and participation of the women in the implementation of the project by, not only give portion of women

participation (minimum 30%) in all relevant project activities, but also design several specific activities for women, such as field school on yard gardening and workshop on the women role on the climate change adaptation action, etc., such activities are to ensure the equality and empowerment for women group. The project will ensure women engagement in several key project activities, such as participatory mapping and watershed management forum. The beneficiary unit of the project is also the household, the project will guarantee that the representation of the households should be not less than 30% are women. Qualitatively project will ensure women involve in any of decision making process during the project operation. The risk for gender equality considered as moderate.

Principle 6: The Rights of Core Workers.

Payments to labor under the project will be made as per Government approved norms duly following minimum wage rate and hence ensuring core labor rights. This project also meets core labor standards of the International Labor Organization. The ILO's core labor standards. The ILO's core labor standards are contained in the LO's Declaration of Principles and Fundamental Rights in 1998. The Declaration includes four fundamental principles and rights, developed further in eight human rights conventions:

- Freedom of association and protection of the right to organize and collective bargaining convention (ILO convention 87 and 98);
- Abolition of forced labor convention (ILO convention 29 and 105);
- Worst forms of child labor convention (ILO convention 138 and 182);
- Discrimination (employment and occupation) convention (ILO convention 100 and 111).

The project/program will ensure to include the ILO's core labor standards in any relevant of project operation. Therefore no risk and no need for further assessment.

Principle 7: Indigenous Peoples

The main target of the project is Indigenous People of Ammatoa Kajang. However there is still a risk that knowledge as they are the main beneficiaries and key stakeholder of the project. therefore that is the risk identified, low, to mitigate the risk, the implementation of the project will always respect and consult the indigenous people at the project target location.

Principle 8. Involuntary Resettlement

The project does not displace any community and hence issue of resettlement does not arise. No risk.

Principle 9: Natural Habitat Protection

This project is not subject to the conversion or relation of unjustifiable critical habitat degradation, including those protected by law so as not to require further assessments on compliance.

Principle 10: Biodiversity Conversion

This project is not related to activities that impact on the reduction of loss of biodiversity or the introduction of known invasive species or unjustifiable and thus require no further assessment of compliance. Precisely this activity will encourage efforts to conserve biodiversity through the cultivation of forest food crops. No risk

Principle 11: Climate Change

The project supports enhancing the adaptive capacity of the vulnerability community against adverse impacts of climate change and is not expected to contribute to GHG emissions. No risk and further assessment required.

Principle 12: Pollution Prevention and Resource Efficiency

Low risk with Communities use more plastic materials in their activities.

Mitigation: Project will develop a plastic material waste disposal procedure for the all project activities. For the resource efficiency, the project will ensure the project part will utilize local available resource and make sure to always consider the sustainability of resources use.

Principle 13: Public Health

No adverse impact on public health related issues is envisaged. No further assessment required for compliance

Principle 14: Physical and Cultural Heritage

No adverse impact on cultural heritage related issues is identified. No further assessment required for compliance.

Principle 15: Soil and Land Conservation

Catchment area treatment is envisaged to help in land and soil conservation and will not create any damage to land & soil resources. No further assessment required for compliance.

Gender Assessment**Gender Empowerment and Social Inclusion (GESI) Perspective in Watershed Project Planning**

This section contains preliminary findings on gender and social context assesement that will highlight the need to take into account customary social and gender context in project implementation to ensure that access, participation and control of project resources will include women and men from different social class in the Ammatoa Kajang customary area community.

Gender and Social Structure

The Ammatoa Kajang customary community holds their customary law in their everyday practices. This involves the management of social life and landscape within their customary area. Thorough understanding of the customary laws in people and land governance is critical to the project.

The Ammatoa Kajang customary community's social structure is divided into three main social strata: the noblemen (*bangsawan - karaeng*), the slaves (*budak/pesuruh - ata*) and the customary elders (*pemangku adat - ada*). The traditional slaves came from poor families within the community that were bought by the noblemen to serve in their household and family, taking all domestics as well as productive responsibilities including farming and plantation works. The customary elders oversee the implementation customary laws.

Although it is said that in modern days, with participation in education, the practice of servitude may have change and *ata* descendants could leave the community to avoid their noble masters demands, it is important to further elaborate the current day pratices. *Ata* may have pivotal roles

in the daily management of customary land, though ownership and decision making of land use and conversion may reside on the noblemen. Ensuring equal access, participation and control over project resources may contribute to achieving better equality in customary social context, but careful design in participation may need to take place.

Strongly holding patriarchal system, the responsibilities of men and women of the Ammatoa Kajang customary community are divided into public and domestic spaces. The responsibilities in public space are held men (in both productive and social works), while in domestic space are held by women. Though certain level of fluidity is allowable, the given gender roles are strongly upheld within the community. The living space of men and women are separated based these gender roles. The main responsibilities of women involve the fulfillment of family and household needs, including care, food, water, fuel (woods) and the production of clothings (traditional weaving), while men manage their land and plantation from land preparation, cultivation to harvesting. In each role, the opposite gender can contribute but only as supporter and not necessarily interchangeable. Ammatoa Kajang women also take the responsibility to manage and sell crops in local markets, which would be their main public space interactions. With this division of roles, the gender based local knowledge and wisdom in their living space also differs.

The intersectionality of gender and social class need to be taken into account. Whilst there is a clear division of roles between men and women in Ammatoa Kajang customary community, the noblewomen and *ata* women, as well as men, may have inequal work burdens and have different living space. A thorough examination of

The *ata* could increase their social status through accumulation of wealth and use social events, especially weddings and funerals, to showcase their wealth. Even so, this doesn't mean that they could hold important positions in the social structure, as these positions are currently based on birth right. To be able to increase their social status through wealth, *ata* men will leave their community and work outside of community boundaries. This may have impact on the living condition of women and kids of *ata* family that are left behind. The Central Statistics Agency data on Bulukumba population in 2016 shows that there are more significantly women than men in this region as result of the necessity to work outside the region due to poverty. Data from integrated Database for Social Protection Program (TNP2K – Bappeda Bulukumba, 2016) shows that from 35.545 poor household in Bulukumba, 10.452 households were led by women. If the trend continues, with the harsher climate change impact in the region, women led households will experience bigger impact as women in this region, especially within the Ammatoa Kajang customary community where the division of roles are more strict, hence access and control to land and other resources, including knowledge to manage farming and plantation, are limited.

Community Leadership and Village Forum Participation

Customary community leader must be held by man, namely the *Ammatoa*, and given based on birth right. Female leader, the *Anrongta*, leads only as temporary substitute, when the *Ammatoa* passes away, to lead temporarily and holds the selection of the new *Ammatoa*. However, there are other kinds of leadership that may involve women, such as the *sanro*, or shaman, usually female, whom the community people respect and come to on health matters. Taking *Anrongta* and *sanro*'s ecological knowledge may bring women's perspective in environment management. To complete,

understanding daily responsibilities of *ata* women will bring understanding to women's daily practice and map the landscape that supports their livelihood.

Under the Ammatoa, there are *galla* men ("ministers"), also selected based on birth right and only from the noblemen or the customary elders families. In the context of formal village administration, women of Ammatoa Kajang customary community can work as village officials or be part of the PKK (*Pemberdayaan Kesejahteraan Keluarga* – Empowerment of Family Welfare) and Posyandu (*Pos Pelayanan Terpadu* – Integrated Health Center) organizations. As village officials, following the state law, women are allowed to be contenders in village chief selection but she will not be selected because the position links with *galla* position in customary social structure and *galla* has to be man. Currently, the highest leadership position held by woman is as the head of *dusun*, the sub-village administration.

A female head of *dusun* in Desa Bonto Baji stated that women are involved in both village governance, taking her experience being selected as head of *dusun* in two terms. According to her, every forum held in village office always includes women, though specifically for PKK women who usually come from the elit group. Both women and men can participate in village planning as well as implementation village plans. The awareness to be socially inclusive is said to manifest in the intention to ensure that poor families are given more opportunities to receive aids from government or other organizations.

There is still the need to further elaborate the level and quality of participation of Ammatoa Kajang women from all social class and men from lower social class in village forum and village planning. But, the assumptions to be made is that they have limited access to village planning and discussion forum. To mitigate this risk, planning must be made to design sub-groups discussion in convenient time and place to ensure that the needs and interests of women and men from different social class within the community are taken into consideration in detailed project planning and implementations.

Access and Control Over Natural Resources and Customary Forest

Access to the general Ammatoa Kajang natural resources are open for women and men, as both are involved in farming and plantation, though with different roles. Women focus in domestic space limit her involvement in day to day land and farm management, but she is involved in land preparation, fertilizing process, planting and harvesting. Women is responsible for processing the crops (drying, packing, and other processes) and selling in the market. While men work daily to tend the farm and plantation.

The control over natural resources is held by the men in the community. Women are positioned only to support the work of men. Lands are inherited to sons in the family, with land and house legal documents under the name of men in the house. Even when the property is bought after marriage, the name put in the legal documents is the husband/son's name.

Thus, traditionally, women have limited control over land use, though some may claim that decisions are made by both. However, women responsibilities and wisdom in crops usage and sales have merits in the decision making of how land is used according to community and

household needs and market demand. Hence, women’s perspective of natural resources management is key in selections of crops.

The access to rivers and ocean is also limited to men, as fishermen. Women process and sell the catch.

Customary forest is a communal land, but access to the forest is controlled by the customary elders. Access to the customary forest is allowed only for key customary rituals, such as on the selection of customary leaders, and in these rituals access given only to customary elders. Women have access to customary forest to obtain wood fuel and special plants to color traditional clothings, however the access for women (and which women are allowed) is granted only by the customary elders. With strict control on forest conservation, endemic plants used for foods and medications may also be conserved in the forest. The knowledge of foods and medications from endemic plants may be owned by *sanro* as the traditional doctor. Women’s access to customary forest is limited by their physical condition, Ie. menstruating women are considered impure and prohibited from entering the forest.

Management of Time and Seasons

Initial discussions and interviews with Ammatoa Kajang men and women reveal that men tend to have more time to participate in social functions, as women have longer and more diverse list of chores to do, both in domestic space to care for the family as well as in public space to sell crops and produce. The time available for men and women to participates in social activities also mapped differently, thus careful time planning must be made to ensure that activities planned do not interfere with their daily responsibilities.

Stage of project must take into account the season calendar that applied in Ammatoa Kajang Customary Community. Below is the season calender as listed in a discussion done with Ammatoa Kajang women from lower social class (done in May 2020).

Season Calendar

Months	Activities	Gender Roles
January	The start of rainy season, with lower rainfall level. Land and seeds preparation to plant (peanut and corn) Time for selling rice and corn in the market	Women and men work in their plantation and farm. Men spend more time on their farm, while women provide foods for the men and other workers Women will go to sell crops in local market. The local markets open 3 days in a week
February	Rainy season with moderate rainfall level. Longterm crops planting (clove, fruits, etc)	Men have the main responsibility for longterm crops planting. Women will go to sell crops in local market. The local markets open 3 days in a week

March	Peak of rainy season with heavy rainfall level and potential gale. Peanut and corn harvesting.	Men have the main responsibility for harvesting corn and peanuts. Women are processing crops in drying as well as selling in the local market. Markets are open 3 days a week.
April	Peak of rainy season with heavy rainfall level and potential gale. Cornpepper planting and harvesting.	Men have the main responsibility for cornpepper planting, both men and women involved in cornpepper harvesting. Women are responsible for cornpepper crops processing and selling.
May	Moderate level of rain and gale. Land and seeds preparation for corn planting. Cornpepper plants and clove tree pruning to prepare for dry season. Fruit season for longterm fruit plants.	Pruining and taking care of plants and trees are done mainly by men with the help of women (in between daily domestic chores).
June	Low level of rainfall and gale. Main activities in the farm and fields are to tend/prune trees and plants. Drying rice continues.	Men mainly work to tend the plants in their plantation, while women are responsible for drying rice.
July	The beginning of dry season. The start of second rice field harvesting. The start of clove harvesting.	During rice harvesting, women have the main responsibility to do the harvesting while men arrange the transportation of rice crops/ With clove plantation, men have the main responsibility for harvesting with the help of women and paid workers. Women are responsible for clove crop drying and selling, but the decision on when to sell and at what price should be discussed with men.
August	Dry season, with rain happens only 1-3 times. Continues rice harvesting. The end of clove harvesting.	Similar to above
September	The peak of dry season. Some still continue to harvest rice.	Men are responsible for watering clove trees and some are still working on rice harvesting. Women are responsible for crops processing: drying rice and cloves
October	Dry season. The season for important social events such as weddings. The Ammatoa Kajang community will be busy with working on wedding celebrations.	Men decide on the amount of contribution given to families who are having weddings. Women are responsible with the preparation and cooking of wedding celebrations.
November	Dry season continues. The most challenging time for family economy, as it is peak time for social events (that requires financial	Some men (and women) leave the village to work as daily worker in housing or building contractor projects to fulfil family needs, to places like Makassar, Bone, Soppeng and Wajo (still within South Sulawesi)

	<p>contributions) but with the lowest income.</p> <p>Land and seeds preparation for peanut and corn.</p>	
December	<p>Dry season continues with occasional rainy days.</p> <p>The most challenging time for family economy, as it is peak time for social events (that requires financial contributions) but with the lowest income.</p> <p>Land and seeds preparation for peanut and corn.</p>	<p>Some men (and women) leave the village to work as daily worker in housing or building contractor projects to fulfil family needs, to places like Makkasar, Bone, Soppeng and Wajo (still within South Sulawesi)</p>

Proposed Implication in Project Activities Planning

Main Objectives:

The overall main objective is to enhance climate resilience and build adaptive capacity toward climate change for vulnerable community through sustainable integrated watershed governance in Indigenous People of Ammatoa Kajang Customary Area in Bulukumba, South Sulawesi Province.

Project Components	Possible Gender and Social Exclusion Risk	Gender and Social Inclusion Related Activities Proposed to Mitigate Risk
<p>Component 1:</p> <p>Developing model of sustainable integrated watershed management inside the Indigenous People of Ammatoa Kajang customary area (Apparang, Baontoa and Raowa Watershed)</p>	<p>Exclusion of women and men from lower social class (<i>ata</i> community) in watershed management planning while men and women from <i>ata</i> community is responsible for the implementation of action plan.</p>	<p>Conduct gender and social context assessment to identify key stakeholders beyond elite group; including in understanding gender based living space, current livelihood model, current watershed management practice</p> <p>Conduct sub-groups discussions with representations of women and men from lower social class (<i>ata</i>) – in separate group by gender and class - to gain needs, interests and concerns on watershed managements – where possible involve women and men from different social class group in watershed forum</p> <p>Conduct gender sensitization and analysis training for project team</p>
<p>Component 2:</p> <p>Promoting and practicing sustainable livelihood adaptive to climate change at the three watershed landscapes in the Indigenous People of Ammatoa Kajang customary area.</p>	<p>Exclusion of women and men from lower social group (<i>ata</i> community) do not have access to knowledge and capacity building on climate adaptive sustainable livelihood</p> <p>Selected sustainable livelihood model and agroforestry are not compatible to current life and environment context and thus not sustainable</p>	<p>Conduct sub-groups learning activities with representation of women and men from lower social class (<i>ata</i>) – if possible in separate group by gender and class - to open access for women and men from all social strata</p> <p>Target women from different social strata (including <i>ata</i> community) to be part of climate resilience women group</p> <p>Conduct gender sensitization training for climate resilience women group</p>
<p>Component 3:</p> <p>Lobbying and Policy Advocacy for climate adaptive sustainable integrated watershed management</p>	<p>GESI perspective on climate adaptive actions in watershed management is not considered in policy making</p>	<p>Ensuring inputs from components 1 gender and social inclusion related activities are taking into account in policy advocating process</p>

and Climate Adaptation Action plan to regency government of Bulukumba and South Sulawesi Provincial government.		
Component 4: Raising awareness, knowledge management and disseminating information on the importance of watershed and climate change impact to the Indigenous People of Ammatoa Kajang customary area.	Exclusion of women and men from lower social group (<i>ata</i> community) do not have access to knowledge and capacity building on the value of watershed ecosystems and impact of climate change, while the lower class are often the poorest and most impacted by the degrading environment quality and climate change	Conduct sub-groups awareness building activities with representation of women and men from lower social class (<i>ata</i>) – if possible in separate group by gender and class - to open access for women and men from all social strata Pilot communication materials to variety of social groups in the Ammatoa Kajang customary community.

PART III: IMPLEMENTATION ARRANGEMENTS

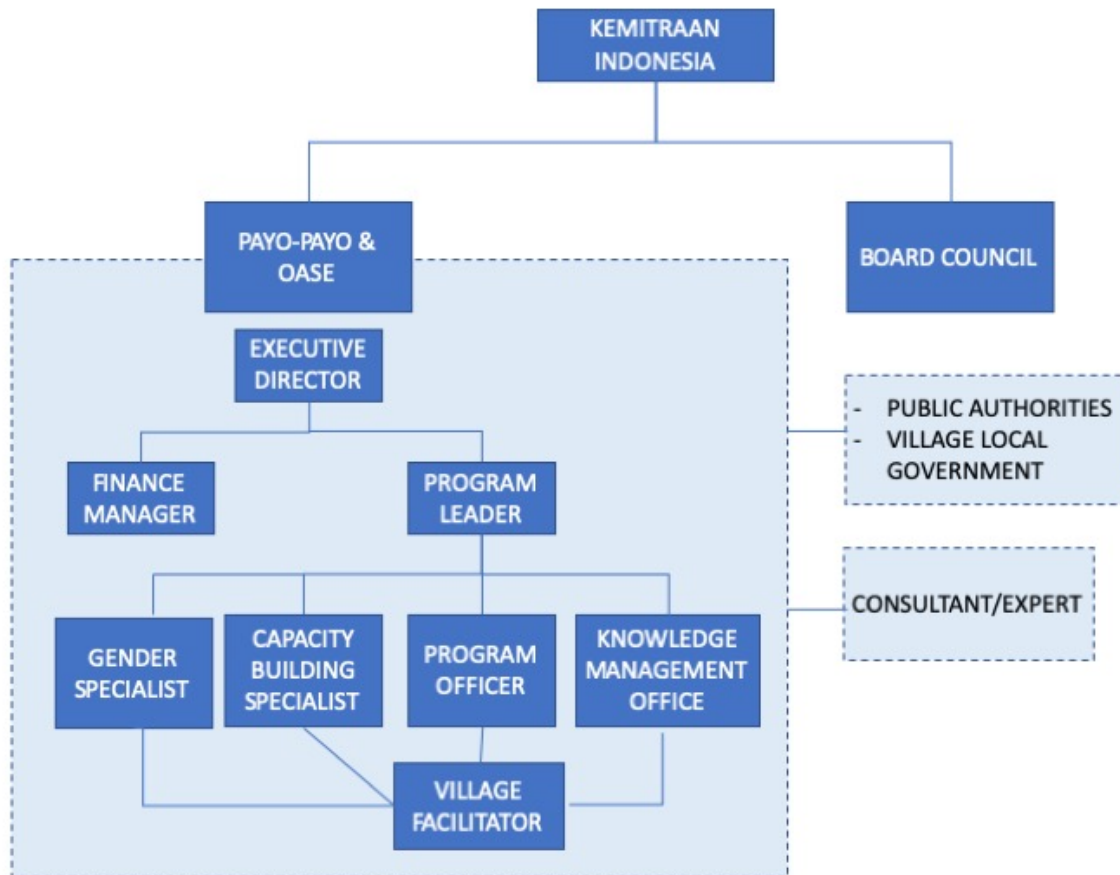
A. Describe the arrangements for project / programme implementation.

For the proposed project the Implementing Entity (IE) will be Kemitraan, and PAYO-PAYO and OASE would function as Executing Entity (EE). For the execution of the project, IE has identified EEs experience and expertise in watershed management issue and climate change adaptation. The identified EEs have years of experience in watershed management and actively involved in participatory community development process in their respective operational area.

The project management implementation structure is formed according to the needs of the program and is filled occupied by person with knowledge and curriculum-based experience. The project will also work with public authority at regency and provincial level to ensure policy direction, program planning and action plans in the project. The team includes the Agriculture Department, the Environmental Management Service, the Forest Service, the Office for the Empowerment of Women and Child Protection, Forest Management Agency and Regional Disaster Management Agency. In addition, at the community level, the project will work with village local government and village council.

Regarding to the gender, the officer from Kemitraan, the executive director of the Executing Entity and the Project Manager will be the gender focal-point.

There will be also the gender specialist dedicated for the project. The Gender Specialist advises the project management on gender policies and trends and relevant linkages to project. The Gender Specialist provides analysis for formulation of strategies and briefings the project management. The Gender Specialist advocates for and represents project in his/her area of expertise as requested by the project. The Gender Specialist may supervise and lead a team of project consultants and project staff. In sum, detail the gender specialist will advise and support project management on gender issues, facilitation of knowledge building on gender issues.



Stakeholders	Roles and responsibilities	Related to program coordination and report
Kemitraan Indonesia	This program will be implemented with Kemitraan Indonesia as Implementing Entity have responsibilities for supporting Perkumpulan PAYO-PAYO as execution entity to reach programme outcomes (implementation and evaluation).	Coordination and supporting Perkumpulan PAYO-PAYO programme.
Perkumpulan PAYO-PAYO and OASE	Perkumpulan PAYO-PAYO responsibility as execution entity to implement set of activities to reach program outputs and outcomes. For the execution of activities, it will collaborate with OASE Bantaeng as the organization that have experience working with Indigenous People of Ammatoa Kajang in Bulukumba	Coordination and send report to Kemitraan Indonesia. Coordination with Bulukumba Government, Village government and community.
Board Council	Board responsible to make decision of program management and quality of programme and financial transparency.	Coordination

Executive director	Who manage and approve programme, controlling quality of program and budget execution	Coordination
Program Leader	Program Manager responsible to ensure the quality of program is run well based on work plan, time schedules and cost. Complement the progress report, programme report.	Coordination and making progress report
Finance Manager	Finance Manager has role to approve and control the budget execution cost and making finance reporting and contractual cost management	Coordination and finance reporting
Program Officers/Village Facilitators	Program officer will execute sets of activities, output and outcome at village level. Facilitate operation of the program such; community development work, financial management execution and programme activities reporting.	Coordination, implementing day to day program, making activity report.
Consultant/Expert	Expert will deliver specific output or activity based on contractual.	Implementing and making report
Capacity Building Specialist	Has role to facilitate the capacity building for the project staff and for the beneficiaries within the project framework.	Facilitation, providing expertise as needed
Knowledge Management Officer	Has responsible to support the project and project facilitator for the knowledge management issue.	Facilitation, providing expertise as needed
Gender specialist	The Gender Specialist advises the project management on gender policies and trends and relevant linkages to project. The Gender Specialist provides analysis for formulation of strategies and briefings the project management	Facilitation, providing expertise as needed

Table of stakeholder involvement based on output and activity

Output	Stakeholders
1.1.1. Multi-stakeholders watersheds management forum established at three watersheds inside the Indigenous People of Ammatoa Kajang customary area	Provincial government: 1. Jeneberang-Walanae Watershed Management Center (BPDAS) 2. Forest Service 3. Regional Planning and Development Agency District Government:

	<ol style="list-style-type: none"> 1. Head of Regency / Vice Head of Regency 2. Department of Environment and Forestry 3. Water Resources Management Agency 4. Government and Village Community Empowerment Agency 5. Spatial Section 6. Department of Agriculture and Animal Husbandry 7. Forest Management Unit (KPH) 8. Forestry Department region 8 Bulukumba Regency 9. Legal bureau of Bulukumba Regency 10. Local NGOs 11. Observers of Indigenous Peoples and the Environment 12. Plantation Service 13. Food Security Service 14. Village Government 15. Sub-district heads in watershed areas 16. Women's Groups 17. Youth Group 18. Farmer groups 19. Customary institutions 20. Local NGO
<p>1.1.2. Watersheds governance planning and action documents formulated and agreed among stakeholders.</p>	<p>Provincial government:</p> <ol style="list-style-type: none"> 1. Jeneberang-Walanae Watershed Management Center (BPDAS) 2. Forest Service 3. Regional Planning and Development Agency <p>District Government:</p> <ol style="list-style-type: none"> 1. Head of Regency / Vice Head of Regency 2. Department of Environment and Forestry 3. Water Resources Management Agency 4. Government and Village Community Empowerment Agency 5. Spatial Section 6. Department of Agriculture and Animal Husbandry 7. Forest Management Unit (KPH) 8. Forestry Department region 8 Bulukumba Regency 9. Legal bureau of Bulukumba Regency 10. Local NGOs 11. Observers of Indigenous Peoples and the Environment

	<p>12. Plantation Service 13. Food Security Service 14. Village Government 15. Sub-district heads in watershed areas 16. Women's Groups 17. Youth Group 18. Farmer groups 19. Customary institutions 20. Local NGO</p>
2.1.1. Climate adaptive sustainable livelihood models practiced at 14 villages in 3 watershed landscape in Indigenous People of Ammatoa Kajang customary area.	Women's groups, Farmer groups, Food security services office
2.1.2. Environment conservation to support sustainable livelihood adaptive to climate change done on three watersheds in Ammatoa Kajang customary area	Village government, Department of Agriculture, farmer groups
3.1.1. Head of Regency regulation on watershed management and climate adaptation action is signed and released.	District government, village government, traditional institutions, farmers' groups, women's groups
3.1.2. Pro-climate integrated sustainable watershed management programs budgeted in the annual regency budgeting and climate adaptive put into regency annual budgeting	Village government, traditional institutions, farmer groups, women's groups, district BPMP-Des, Provincial Development Planning Agency, Provincial Forest Service, BPDAS Jeneberang Walanae
4.1.1. Knowledge of local people on the importance of watershed and climate change impact increased	Provincial Government, Regency Government, Village Government, Customary Institutions, Women's Groups, Farmer Groups, Observers
4.1.2. Project information disseminated	<p>Provincial government:</p> <ol style="list-style-type: none"> 1. Jeneberang-Walanae Watershed Management Center (BPDAS) 2. Forest Service 3. Regional Planning and Development Agency <p>District Government:</p> <ol style="list-style-type: none"> 1. Head of Regency / Vice Head of Regency 2. Department of Environment and Forestry 3. Water Resources Management Agency 4. Government and Village Community Empowerment Agency 5. Spatial Section 6. Department of Agriculture and Animal Husbandry 7. Forest Management Unit (KPH)

	<ol style="list-style-type: none">8. Forestry Department region 8 Bulukumba Regency9. Legal bureau of Bulukumba Regency10. Local NGOs11. Observers of Indigenous Peoples and the Environment12. Plantation Service13. Food Security Service14. Village Government15. Sub-district heads in watershed areas16. Women's Groups17. Youth Group18. Farmer groups19. Customary institutions20. Local NGO
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B. Describe the measures for financial and project / programme risk management. Details on identified risks, the perceived level of those risks, and the planned mitigation measure are presented below:

Risk	Level of Risk	Mitigation Plan
Multi-stakeholders Climate Change Adaptation and Watershed Management Forum cannot be established	Low	Intensive approach to all respective stakeholders and comprehensive and intensive discussion on the importance of the forum with all the stakeholders. It will also be involving the authority of the head and vice head of regency
Stakeholder do not understand the importance of landscape based approach toward watershed management.	Medium	Intensive discussion series involving all respective stakeholders both formal and informal discussion, and awareness rising continuously done by the project facilitators during their stay at the field/site. Project facilitators required to live in at the villages where the project carried out.
Region-based and Sectoral egoism among stakeholders	Medium	Effort to fine-tuning perspective on watershed management and the risk of climate change. It can be done through discussion involving all stakeholders. And effort finding the crosscutting issues that will bridge the interest of all stake holders. Effort to give understanding to all stakeholders that the watershed landscape is inter-connected.
Community refused to get involved on the program	Low	There should be social preparation at the initial phase of the program. The project facilitators are required to live in at the villages project site. The approach should be with community organizing

		strategy, not “project-based” approach.
It is difficult to find land for demonstration plot for activities that need demonstration plot	Low	There should be social preparation at the initial phase of the program. The project facilitators are required to live in at the villages project site. The approach should be with community organizing strategy, not “project-based” approach.
The regency offices not willing to commit for pro climate budgeting for their programs.	Medium	Approach and lobby to the regency development agency and the head of district and vice head of district.
Technology is not available and not suitable, for activities that need technology input	Low	The technologies that will be introduce are the appropriate technologies. The suitability will be tested before hand
Synchronization with village mid-term development plan is difficult	Medium	Tuning the timing of formulation of annual village development budgeting with the program.

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

ESP Adaptation Fund	Compliance measure
Compliance with law	The project suitable with the law and policy of the government at national, province and regency level. Such as act #17 2014 about Climate Change Protocol Ratification.
Access and equity	By design the project have taken into account the inclusion and equity of all venerable groups of the community.
Human rights	No human right violence cause by the project.
Gender and Women Empowerment	The project design to encourage and advancing the meaningful participation of women in all part of the project activities.
Core Labor Rights	The project will work in the frame of labor right law, any part of the project that need to compliance to the labor right will be taken into account.
Indigenous People	The special focus of the project is Indigenous People of Ammatoa Kajang at Bulukumba Regency. The main beneficiary of the project will be the Indigenous People of Ammatoa Kajang.
Involuntary Resettlement	There will be component of the project that will required resettlement.

Protection habitat	In most of the mitigation part of the project will contribute to the protection of the habitat.
conservation of Biological Diversity	Biological diversity will be main part of the project, there will be activities related directly to the conservation action, such as mangrove conservation. The mangrove conservation would contribute to the marine biological diversity
Climate Change	The project main objective is enhancing resilience of the Indigenous People of Ammatoa Kajang toward climate change.
Pollution prevention and resource efficiency	No activities of the project will emit any pollutant that required mitigation.
Public health	No negative impact of the project to the public health
Physical and cultural heritage	No physical and cultural heritage will be affected by the project
lands and soil conservation	The project having especial component for land, soil and water conservation.

Project Grievance Mechanism

Introduction

The project grievance mechanism addresses stakeholders' complaints related to issues where projects have failed to respect environment, social and cultural principles, standards, and procedures as well as gender issue. The mechanism applies to all part of the projects operation.

The aim of the grievance mechanism is to provide people or communities fearing or suffering adverse impacts from a project with the assurance that they will be heard and assisted in a timely manner. Each grievance case is reviewed to understand whether a potential breach of principles, standards or procedures has occurred. A process identifies the root causes of the subject of the grievance and ensures that issues of non-compliance are corrected; some cases may also require remedial actions to redress potential harm resulting from a failure to respect the principles, standards, and procedures or preventive measures to avoid repetition of non-compliance.

Eligibility

Any community, organisation, project stakeholder or affected group (consisting of two or more individuals) who believes that it may be negatively affected by the executing entity's failure to respect environment, social and cultural principles, standards, or procedures may submit a complaint.

Representatives (a person or a local organisation) can submit a complaint on behalf of a community, project stakeholder or affected group. Anonymous complaints will not be considered, however, complainants' identities will be kept confidential upon their written request.

Stage process for resolving a grievance

The best approach to resolving grievances involves project management and the affected party reviewing the conflict and deciding together on a way forward that advances their mutual interests. This reflects the fact that local and country authorities often have better information on and understanding of the causes of disputes arising from project implementation. 'Deciding together' approaches are usually the most accessible, natural, unthreatening and cost-effective ways for communities and project management to resolve differences.

If interaction with the executing entity has not been successful, stage 2 is to raise the concern with Implementing Entity by contacting the Implementing Entity office and/or dedicated person for this grievance mechanism.

In addition, project will publicly post instructions in Bahasa Indonesia and local languages as appropriate (e.g., Bahasa Dentong) directing people to voice complaints to any of the following, in any order with which they are comfortable.

- Karno Batiran; Perkumpulan PAYO-PAYO chief executive; karnobatiran@payopayo.or.id; +62 85255222852; +62 0411-3971275;
- Dewi Rizki; Project Implementing Entity Contact Person, Kemitraan Indonesia: +62-21-7279 9566; Dewi.Rizki@kemitraan.or.id.
- Adaptation Fund Board secretariat; Mail stop: MSN P-4-400; 1818 H Street NW Washington DC 20433 USA; Tel: 001-202-478-7347 afbsec@adaptation-fund.org

Should we receive any complaint or grievance, we will immediately consult with the Project Implementing Entity and appropriate government authority, at a minimum. Grievances raised will be communicated to the Implementing Entity within 15 days, together with a proposed response.

Complainants submitted should explain that good-faith efforts have been made to first address the problem directly with the executing entity and then with the Implementing Entity. If the concern is highly sensitive or the complainant needs confidentiality or fears retaliation, the first two stages can be skipped and the complaint can be submitted directly to the Adaptation Fund.

A written complaint sent by post, fax or email should include the following information (in any language):

- complainant's name, address, telephone number, fax number and email address and valid proof of representation if the complaint is filled by the representative of a legal person/entity;
- description of the project or programme concerned;
- the harm that is, or may result from the project executing entity's failures to respect environment, social, cultural and gender principles, standards, or procedures;
- the principle, standard, or procedure (if known) allegedly breached;

- actions taken to solve the issue, including previous contacts with the executing entity and reasonably detailed explanations why these stages have not provided a satisfactory solution; and
- list of supporting documents and attachments, as appropriate.

A template for the complaint form below

Grievance Form
PERKUMPULAN PAYO-PAYO - OASE

Complainant Data		
<i>Name</i>		
<i>Address</i>		
<i>Phone No.</i>		
<i>Fax</i>		
<i>E-mail</i>		
Grievance Information		
<i>Location</i>		
<i>Program</i>		
<i>Parties was reported</i>		
<i>Date of occurrence</i>		
<i>Detail grievance:</i>		
<p><i>(Completed with related evidence or documents)</i> <i>(if this part is insufficient, then allowed to use additional paper)</i></p>		
<i>Complainant Name and Signature</i>		<i>Date:</i>
<i>Receiver name and signature</i>		<i>Date:</i>

Can be filed to:

Perkumpulan PAYO-PAYO
d/a. TB Innawa, Belakang Perum Griya Wisata Bantimurung
Jalan. Poros Maros – Bone KM 13, Dusun Bantimurung, Desa Jenetaesa, Kec. Simbang, Kabupaten Maros,
Sulawesi Selatan, Indonesia, 90561, Phone: +62 411 3971275.

Kemitraan
Jl. Taman Margasatwa No. 26C
Pasar Minggu, Jakarta Selatan
Tel: +62-21-227 80 580
Fax: +62-21-781 232

Adaptation Fund Board secretariat
Mail stop: MSN P-4-400
1818 H Street NW
Washington DC
20433 USA
Tel: 001-202-478-7347
afbsec@adaptation-fund.org

D. Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan.

Based on the result framework presented below a monitoring and evaluation system will be prepared. Based on the baseline done at the time of project starting bench-mark for each of the proposed interventions would be firmed up. The system will encompass a clear data collection and compilation plans for monitoring qualitative as well as quantitative results indicators using appropriate methods and tools. Data will be collected periodically at specified intervals and analyzed to track the progress.

The standard result framework and indicators have been created as the base of the project has been design. The result framework will provide the monitoring, evaluation and knowledge management system of the project, the knowledge management system will guide the compilation and dissemination of relevant project knowledge about issues, experiences and insights to all stakeholders.

The monitoring and evaluation will be based on the result framework with clear indicators, method and responsible parties.

Monitoring of the program implementation process is carried out every month and every 4 months. Monthly monitoring is done through checking monthly reports from the field while quarterly monitoring will be carried out with field visits) to see two things: first, implementation of indicator achievements in each activity and outputs through verification of program implementation report documents (administrative and financial reports, deliverables, output, documentation of activities, attendance list and photos) as well as responses and feedbacks from villagers/community members and all relevant stakeholders. Second, methodological and technical review to recognize obstacles and challenges and opportunities in each implementation of activities as lessons. The monthly monitoring will be conducted by the project management unit at execution level (the executing entity). i.e.PAYO-PAYO and OASE organization management. While the 4 months monitoring will be done by Kemitraan Indonesia, there will be monitoring and evaluation dedicated staff who visit the project site for 4 monthly monitoring.

Program evaluation is carried out in mid-term evaluation and final program evaluations. Evaluation is intended to find out how the program can be run more effectively (administratively and technically) to achieve the predetermined outcomes of the program and risk management plans that might be found, or to make new innovations that originate from smart practices that contribute to more effective outcomes and goals. The evaluation will be done by the Kemitraan Indonesia as the implementing entity.

Lesson Learned. Lesson Learned is done in two levels. The first level, at the level of villagers and stakeholders. Second level, in the program implementation organization. Lesson Learned at the first level is carried out with villagers and other stakeholders in the form of a mid-term project lesson learned workshop to find solutions of problems or to identify innovations that are carried out to achieve outputs. Lesson Learned at the second level, is carried out to overcome possible administrative and financial management obstacles and hinder the progress of implementation and flexibility in the field and to find technical solutions.

The monitoring and evaluation process will involve villagers for 3 monthly monitoring, the data for monitoring and evaluation will be from villagers and other stakeholders, collected through interviews and FGD and there will also be lessons learned workshops (mid-term) involving beneficiaries and all stakeholders. As well as for the mid-term and final evaluation, there will be mid-term and final evaluation workshop involving villagers and all stakeholders.

Methodologically, monitoring and evaluation will be done in two ways. First, Logical Framework/result framework Analysis, the method used to check whether the program's performance is in accordance with the result framework that has been made previously, in terms of activity planning, implementation, project output and outcome achievements, examining indicators and means of verification of each stage of the program planned and implemented, also checks the assumptions and risks that have been identified previously whether they are still relevant to the project or not and need to be adjusted. Second method is Outcome Harvesting: a monitoring and evaluation methodology employed to identify, describe, verify and analyse the changes that happened through a project intervention. It is designed to examine the contribution of the project to the change that has happened by collecting evidences of change.

The monitoring evaluation will be carried out by the monitoring and evaluation team consist of the project and organization management executing entity: Executive director, Gender specialist, Knowledge and Capacity Building Specialist and Monitoring and Evaluation dedicated staff from Kemitraan.

The reporting of the project for narrative report will be prepared by the project implementation team on the ground (project manager and village facilitators). The report will be submitted to the organization's management for examination and approval by the project leader and Executive director. The project leader is responsible for submitting to Kemitraan. The financial report will be prepared by the finance officer and approved by the Executive director and Project Leader, the finance officer or executive director will be responsible to submit to Kemitraan.

For the target, indicators, method, risk and assumption refer to monitoring and evaluation plan and result framework below.

Monitoring and Evaluation Activities and Budget

Activities	Targets	Cost (\$)	Time
Baseline and end line survey	Outcome, output indicator targets	\$ 31,343.28	Start and End of Project
Final Project Survey	Target indicator outcome, output	\$ 1,865.67	End of Project
Report reviews, interviews, PMU FGD	Process, milestones, efficiency, effectiveness, results	\$ 1,865.67	End of Project
Monev workshop	Process, milestones, efficiency, effectiveness, results	\$ 12,843.28	Every four months, mid-term and end of project
Audit	Management	\$ 9,492.28	Twice during project cycle (once a year)

Project Monitoring and Evaluation Plan

Project Results	Indikator	Target	Monitoring Methods & Tools	Frequency	Responsibility	Operational Definitions
Component 1: Developing model of sustainable integrated watershed management inside the Indigenous People of Ammatoa Kajang customary area (Apparang, Baontoa and Raowa Watershed).						
Outcome1.1: Management and governance of three watersheds inside the Indigenous People of Ammatoa customary area improved.	There is a Integrated Watershed Management document & action plans in 3 watersheds in the Ammatoa Kajang Indigenous People Customary area.	Month 1-10		2 times	Dedicated Monev person	Integrated watershed management documents and action plans in 3 watersheds in the Kajang customary area serve as a reference and guidance for the parties in designing activities programs

						that can support the watershed improvement.
Output Level						
Output 1.1.1: Multi-stakeholders watersheds management forum established at three watersheds inside the Indigenous People of Ammatoa Kajang customary area.	Establishment of integrated watershed management forum & Climate Change Adaptation forum # of parties involve in the established forum # of women member of the forum	Month 1-2		1 time	Dedicated Monev person	Multi-stakeholder forum is comprise of all relevant parties related to the watershed management. It is a cross sectoral and cross scale forum, such as spatial planning office, watershed management office, agriculture office, Regency development planning agency, provincial government offices, community representatives, woman group, indigenous people community. Multi-stakeholder forums will discuss, discuss and implement integrated watershed management & governance plan.

Output 1.2.2: Watersheds governance planning and action plan documents formulated and agreed among stakeholders.	Formulation of watersheds governance planning Formulation of action plan for integrated watershed management	Mount 2-10		1 time	Dedicated Money person	The integrated watershed management document and action plan document are the guidance for watershed management models (upstream, middle, downstream) which become the reference for the parties in designing the program activities in the three watersheds.
Component 2: Promoting and practicing sustainable livelihood adaptive to climate change at the three watershed landscapes in the Indigenous People of Ammatoa Kajang customary area.						
Outcome 2.2: Resilience of people in Indigenous people of Ammatoa Kajang customary area enhanced and vulnerability to climate risk reduced	# of household practicing sustainable climate resilience livelihood at 14 villages at the 3 watershed area.	Month 8-23		2 times	Dedicated Money person	This sustainable livelihood activities are expected to increase economic resilience of the household that ultimately contribute to the strengthening of the community resilience toward climate change impact.
Output Level						

Output 2.1.1: Climate adaptive sustainable livelihood models practiced at 14 villages in 3 watershed landscape in Indigenous People of Ammatoa Kajang customary area.	# of farmers practicing adaptive sustainable livelihood practice in the Indigenous People of Ammatoa Kajang Customary Area	Month 8-22		2 times	Dedicated Money person	This sustainable livelihood activities are expected to increase economic resilience of the household that ultimately contribute to the strengthening of the community resilience toward climate change impact.
Output 2.2.2: Environment conservation to support sustainable livelihood adaptive to climate change done on three watersheds in Ammatoa Kajang customary area.	# of farmer group model practicing soil and water conservation practice, at 6 relevant and suitable villages. (3 at upstream, and 3 at middle stream)	Month 22-23		1 times	Dedicated Money person	The terraces technique on sloping land is an example of soil and water conservation to support sustainable agriculture.
Component 3: Lobbying and Policy Advocacy for climate adaptive sustainable integrated watershed management and Climate Adaptation Action plan to regency government of Bulukumba and South Sulawesi Provincial government.						
Outcome 3.1: Pro-climate integrated watershed management	The Bulukumba Regency government issued 1 legislation/regulation product on	Month 8-22		2 times	Dedicated Money person	Not only issuing government regulations, but also the roles and responsibilities and

and climate change action plan integrated into regency development plan.	integrated watershed management and an action plan for adaptation to climate change, as well as commitments of at least 10 government agencies to budget activities in order to support the regulation on integrated watershed management.					commitment of the regency government to implement the regulation related to the watershed management, it should include the allocation of budget for implementing the action plan.
Output Level						
Output 3.1.1: Head of Regency regulation on watershed management and climate adaptation action is signed and released.	The release of regency regulation on integrated watershed management & climate adaptation action plan	Month 8-19		2 times	Dedicated Money person	This government regulation is a regulation that will bind the parties to carry out integrated watershed management and climate change adaptation action plans in 3 watersheds inside the Kajang customary areas.
Output 3.1.2: Pro-climate integrated sustainable watershed management programs budgeted in the	# of offices Budgeted pro-climate watershed management & Climate Change Adaptation action plan	Month 15-22		2 times	Dedicated Money person	It will ensure that the integrated watershed management action plan and climate change adaptation action plan are accommodated in

annual regency budgeting and Climate adaptive budgeting put into regency annual budgeting	Amount of budget put in the development activities that pro-climate on the watersheds area in the indigenous people of Ammatoa Kajang customary area.					regency development plan.
Component 4: Raising awareness, knowledge management and disseminating information on the importance of watershed and climate change impact to the Indigenous People of Ammatoa Kajang customary area.						
Outcome 4.1: The value of watershed and impacts of climate change are understood by local people.	30.000 people inside and around indigenous people Ammatoa Kajang aware and recognize the importance of watershed and the condition of climate change and its impact to the livelihood. 10.000 people have basic knowledgede about the the Adaption Fund project.	Month 19-24		2 times	Dedicated Monev person	There will be a village/community level discussion series to discuss and disseminate the information and knowledge on the importance of watershed and climate change issue at the community level. Besides, there will seminar and press outreach at regency level for disseminating information about watershed, climate change and the project.
Output Level						
Output 4.1.1: Knowledge of local people on	# of people who know basic knowledge on the	Month 19-23		1 time	Dedicated Monev person	

the importance of watershed and climate change impact increased	value of watershed and climate change issue.					
Output 4.1.2: Project information disseminated	# of people know the project	Month 22-24		1 time	Dedicated Money person	Dissemination of project information is carried out as a form of conveying the responsibility for implementing the project to all relevant parties.

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

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

Outcome/Output	Indicator	Baseline	Target	Source of verification	Risk & Assumption	Operational Definitions/Remark
Component 1: Developing model of sustainable integrated watershed management inside the Indigenous People of Ammatoa Kajang Customary Area (Apparang, Baontoa and Raowa Watershed).						
Outcome1.1: Management and governance of three watersheds inside the Indigenous People of Ammatoa customary area improved.	There is a Integrated Watershed Management document & action plans in 3 watersheds in the Ammatoa Kajang Indigenous People Customary area.	There is no yet Integrated Management of the watershed planning on for the 3 watershed inside the customary area of Ammatoa Kajang	A document of Integrated Management of the watershed planning on for the 3 watershed inside the customary area of Ammatoa Kajang	Action plan document on Integrated Management of the watershed planning on for the 3 watershed inside the customary area of Ammatoa Kajang	There is adequate capacity for the forum to formulate the action plan document.	Integrated watershed management documents and action plans in 3 watersheds in the Kajang customary area serve as a reference and guidance for the parties in designing activities programs

		Indigenous People	Indigenous People.	Indigenous People.		that can support the watershed improvement.
Output 1.1.1: Multi-stakeholders watersheds management forum established at three watersheds inside the Indigenous People of Ammatoa Kajang customary area.	Establishment of integrated watershed management forum & Climate Change Adaptation forum # of parties involve in the established forum # of women member of the forum	There is no yet multi-stakeholder forum for Management and governance of the 3 watershed inside the customary area of Ammatoa Kajang Indigenous People.	3 forum, 1 forum each watershed area At least 50 parties (government offices & agencies, village government, CSO) Member of the forum at least 30% in portion are women.	Decision letter of Head of Regency of Bulukumba on the designation and legalization of Forum Multi-stakeholders for Management and governance of the 3 watershed inside the customary area of Ammatoa Kajang Indigenous People.	There is support from the Regency government on the forum. There is good commitment among the stakeholders to form the multi-stakeholder forum. Risk: There is a different interest across sectors and parties consequently it will need more time for forum establishment. Mitigation: there will be a series of meetings among parties that is expected to be perspective synchronization and interest among parties.	Multi-stakeholder forum is comprise of all relevant parties related to the watershed management. It is a cross sectoral and cross scale forum, such as spatial planning office, watershed management office, agriculture office, Regency development planning agency, provincial government offices, community representatives, woman group, indigenous people community. Multi-stakeholder forums will discuss, discuss and implement integrated watershed management & governance plan.

<p>Output 1.2.2: Watersheds governance planning and action plan documents formulated and agreed among stakeholders.</p>	<p>Formulation of watersheds governance planning</p> <p>Formulation of action plan for integrated watershed management</p>		<p>1 Document of integrated watershed management for each watershed area.</p> <p>1 set of action plan for each watershed area</p>	<p>Action plan document at 3 watershed</p>	<p>Forum has adequate capacity and knowledge to formulate the action plan.</p>	<p>The integrated watershed management document and action plan document are the guidance for watershed management models (upstream, middle, downstream) which become the reference for the parties in designing the program activities in the three watersheds.</p>
<p>Component 2: Promoting and practicing sustainable livelihood adaptive to climate change at the three watershed landscapes in the Indigenous People of Ammatoa Kajang customary area.</p>						
<p>Outcome 2.2: Resilience of people in Indigenous people of Ammatoa Kajang customary area enhanced and vulnerability to climate risk reduced</p>	<p># of household practicing sustainable climate resilience livelihood at 14 villages at the 3 watershed area.</p>	<p>None</p>	<p>1.775 household (7100 person)</p> <p>Male: 4600 Female: 2500</p>	<p>Activity report, photo documentation, activity attendance list.</p>	<p>There is understanding of villagers on the project purpose.</p> <p>Villagers willing to participate on the project.</p> <p>Risk: adding burden on women activities.</p> <p>Mitigation: the programing of activity will always consult with women at the community and adjusting the</p>	<p>This sustainable livelihood activities are expected to increase economic resilience of the household that ultimately contribute to the strengthening of the community resilience toward climate change impact.</p>

					programming accordingly.	
Output 2.1.1: Climate adaptive sustainable livelihood models practiced at 14 villages in 3 watershed landscape in Indigenous People of Ammatoa Kajang customary area.	# of farmers practicing adaptive sustainable livelihood practice in the Indigenous People of Ammatoa Kajang Customary Area	None	1.775 household (7100 person) Male: 4600 Female: 2500	Activity report, photo documentation, activity attendance list.	There is understanding of villagers on the project purpose. Villagers willing to participate on the project. Risk: adding burden on women activities. Mitigation: the programing of activity will always consult with women at the community and adjusting the programming accordingly.	This sustainable livelihood activities are expected to increase economic resilience of the household that ultimately contribute to the strengthening of the community resilience toward climate change impact.
Output 2.2.2: Environment conservation to support sustainable livelihood adaptive to climate change done on three watersheds in Ammatoa Kajang customary area.	# of farmer group model practicing soil and water conservation practice, at 6 relevant and suitable villages. (3 at upstream, and 3 at middle stream)	None	6 farmer group practicing “terasering” technique at slope field at 6 villages.	Activity report, photo documentation,.	Farmers are willing to adopt the “terasering” technique for slope field for demonstration plot.	The terraces technique on sloping land is an example of soil and water conservation to support sustainable agriculture.
Component 3: Lobbying and Policy Advocacy for climate adaptive sustainable integrated watershed management and Climate Adaptation Action plan to regency government of Bulukumba and South Sulawesi Provincial government.						

<p>Outcome 3.1: Pro-climate integrated watershed management and climate change action plan integrated into regency development plan.</p>	<p>The Bulukumba Regency government issued 1 legislation/regulation product on integrated watershed management and an action plan for adaptation to climate change, as well as commitments of at least 10 government agencies to budget activities in order to support the regulation on integrated watershed management.</p>	<p>There is no yet government regulation product in Bulukumba Regency that supports integrated watershed management and climate change adaptation plans.</p>	<p>1 government regulation and 10 agreements of 10 government agencies to support integrated watershed management and adaptation action plans.</p>	<p>Copies of Document of government regulation released regulation. Copies of agreements letters, activity reports, activity photo documentation.</p>	<p>Support from regency government. During the design the program there has been adequate consultation, lobby, and commitment building with the Bulukumba Regency government officers, including the vice head of Bulukumba regency and several relevant head of government offices</p>	<p>Not only issuing government regulations, but also the roles and responsibilities and commitment of the regency government to implement the regulation related to the watershed management, it should include the allocation of budget for implementing the action plan.</p>
<p>Output 3.1.1: Head of Regency regulation on watershed management and climate adaptation action is signed and released.</p>	<p>The release of regency regulation on integrated watershed management & climate adaptation action plan</p>	<p>There is no yet government regulation product in Bulukumba Regency that supports integrated watershed management and climate change adaptation plans.</p>	<p>1 Bulukumba Regency government regulation on integrated watershed management and climate change adaptation action plans.</p>	<p>Copies of Document of government regulation released regulation. Copies of agreements letters, activity reports, activity photo documentation.</p>	<p>Support from regency government. During the design the program there has been adequate consultation, lobby, and commitment building with the Bulukumba Regency government officers, including the vice head of Bulukumba</p>	<p>This government regulation is a regulation that will bind the parties to carry out integrated watershed management and climate change adaptation action plans in 3 watersheds inside the Kajang customary areas.</p>

					regency and several relevant head of government offices	
Output 3.1.2: Pro-climate integrated sustainable watershed management programs budgeted in the annual regency budgeting and Climate adaptive budgeting put into regency annual budgeting	# of offices Budgeted pro-climate watershed management & Climate Change Adaptation action plan Amount of budget put in the development activities that pro-climate on the watersheds area in the indigenous people of Ammatoa Kajang customary area.		At least 10 government offices and agencies 5% from the total budget of each offices and agencies	Copies of agreements letters, activity reports, activity photo documentation.	Risk: mutation of head of government offices. Mitigation: The agreement should be include on the annual regency development planning, so it will still allocated even there is change on the management of the offices.	It will ensure that the integrated watershed management action plan and climate change adaptation action plan are accommodated in regency development plan.
Component 4: Raising awareness, knowledge management and disseminating information on the importance of watershed and climate change impact to the Indigenous People of Ammatoa Kajang customary area.						
Outcome 4.1: The value of watershed and impacts of climate change are understood by local people.	30.000 people inside and around indigenous people Ammatoa Kajang aware and recognize the importance of watershed and the condition of climate change and its impact to the livelihood.	None, such effort identified never been done before.	30.000 people 10.000 people	Activity report, photo documentation, activity attendance list, books, press articles, fact sheet, distribution list.	Risk: Less effectiveness of campaign media. Mitigation: The media campaign will be adjusted with local context	There will be a village/community level discussion series to discuss and disseminate the information and knowledge on the importance of watershed and climate change issue at the community level. Besides, there will seminar and press outreach at regency

	10.000 people have basic knowledege about the the Adaption Fund project.					level for disseminating information about watershed, climate change and the project.
Output 4.1.1: Knowledge of local people on the importance of watershed and climate change impact increased	# of people who know basic knowledge on the value of watershed and climate change issue.	None	30.000 population within and around Ammatoa Kajang Customary Area.	Activity report, photo documentation, activity attendance list, books, press articles, fact sheet, distribution list.	Risk: Less effectiveness of campaign media. Mitigation: The media campaign will be adjusted with local context	
Output 4.1.2: Project information disseminated	# of people know the project	None	10.000 population within and around Ammatoa Kajang Customary Area.	Activity report, photo documentation, activity attendance list, books, press articles, fact sheet, distribution list.	Risk: Less effectiveness of campaign media. Mitigation: The media campaign will be adjusted with local context	Dissemination of project information is carried out as a form of conveying the responsibility for implementing the project to all relevant parties.

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

Project Objective	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
<p>Enhance climate resilience and build adaptive capacity toward climate change for vulnerable community through sustainable integrated watershed governance in Indigenous People of Ammatoa Kajang Customary Area in Bulukumba, South Sulawesi Province.</p>	<p>Resilience of the People inside the Customary area of Indigenous People of Ammatoa Kajang improved through sustainable integrated watershed management</p> <p># of people inside the Customary area of Indigenous People of Ammatoa Kajang have increased capacity and resilience toward climate related risks and hazards</p>	<p>Outcome 1: Reduced exposure to climate-related hazards and threats.</p> <p>Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level</p> <p>Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress.</p> <p>Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas.</p> <p>Outcome 7: Improved policies and regulations that promote and enforce resilience measures</p>	<p>1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis</p> <p>3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses.</p> <p>3.2. Percentage of targeted population applying appropriate adaptation responses</p> <p>5. Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress.</p>	<p>US \$ 1,125,015.16</p>

			<p>6.1 Percentage of households and communities having more secure access to livelihood assets.</p> <p>6.2. Percentage of targeted population with sustained climate-resilient alternative livelihoods.</p> <p>7. Climate change priorities are integrated into national development strategy</p>	
Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
<p>Outcome1: Reduced climate change vulnerability and risk by improving management and governance of watersheds in Indigenous People of Ammatoa Kajang customary area in Bulukumba.</p>	<p># of vulnerable people to climate risk reduced in the Customary area of Indigenous People of Ammatoa Kajang.</p> <p># of climate related hazard occurrence reduced at watersheds area in the indigenous People of Ammatoa Kajang customary area.</p>	<p>Output 1.1: Risk and vulnerability assessments conducted and updated.</p> <p>Output 1.2: Targeted population groups covered by adequate risk reduction systems</p> <p>Output 4: Vulnerable development sector services and infrastructure assets strengthened in response to</p>	<p>No. of projects/programmes that conduct and update risk and vulnerability assessments (by sector and scale).</p> <p>1.2 No. of early warning systems (by scale) and no. of beneficiaries covered</p>	<p>US \$ 188,732.09</p>

		climate change impacts, including variability		
			<p>4.1.1. No. and type of development sector services modified to respond to new conditions resulting from climate variability and change (by sector and scale).</p> <p>4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale)</p>	

<p>Outcome 2.</p> <p>Enhanced resilience of people in Indigenous People of Ammatoa Kajang customary area with climate adaptive sustainable livelihood development and climate mitigation actions.</p>	<p># of people have economic resilience to face impact of the climate change.</p> <p># and width of area mitigated from climate related risk and hazard at the 3 watershed landscape.</p>	<p>Output 5: Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability.</p> <p>Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability</p>	<p>5.1. No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale).</p> <p>6.1.1.No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies.</p> <p>6.2.1. Type of income sources for households generated under climate change scenario</p>	<p>US \$ 615,105.23.</p>
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<p>Outcome 3; Advanced Sustainable Integrated Watershed Governance adaptive to Climate Change on regency development planning and development budgeting in Bulukumba regency.</p>	<p>Regency regulation on Climate Change Adaptation Action Plan & Integrated watershed Management is signed and released.</p> <p># of government offices and agencies integrated the Climate Change Adaptation Action Plan and Integrated Watershed Management.</p> <p>Amount of budget allocated for Climate Change Adaptation Action Plan & Integrated Watershed Management at Regency budgeting</p>	<p>Output 7: Improved integration of climate-resilience strategies into country development plans</p>	<p>7.1. No. of policies introduced or adjusted to address climate change risks (by sector)</p> <p>7.2. No. of targeted development strategies with incorporated climate change priorities enforced</p>	<p>US \$ 78,088.43</p>
<p>Outcome 4; The value of watershed and impacts of climate change are understood by local people.</p>	<p># of people who know basic knowledge on the value of watershed and climate change issue.</p>	<p>Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities</p>	<p>3.1 No. of news outlets in the local press and media that have covered the topic</p>	<p>US \$ 56,451.49</p>

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

Description Item			Cost
Total Project/Programme Cost			\$ 938,377.24
Component 1: Developing model of sustainable integrated watershed management inside the Indigenous People of Ammatoa Kajang customary area (Apparang, Baontoa and Raowa Watershed)			\$ 188,732.09
Outcome	1.1	Management and governance of three watersheds inside the Indigenous People of Ammatoa customary area improved.	\$ 188,732.09
Output	1.1.1	Multi-stakeholders watersheds management forum established at three watersheds inside the Indigenous People of Ammatoa Kajang customary area	\$ 10,651.86
Activity	1.1.1.1	Project Team Orientation	\$ 731.34
	1.1.1.2	Program socialization & Kickoff	\$ 2,864.55
	1.1.1.3	Series of multi stakeholder workshop for establishing watershed management coordination forum and formulating forum workplan	\$ 5,750.00
	1.1.1.4	Watershed management multistakeholder coordination forum legalization	\$ 1,305.97
Output	1.1.2	Watersheds governance planning and action documents formulated and agreed among stakeholders	\$ 178,080.23
Activity	1.1.2.1	Workshop on preparation for study for formulating integrated watershed management plan and climate adaptation action plan	\$ 1,383.58
	1.1.2.2	Workshop for making instrument for study for formulating integrated watershed management plan and climate adaptation action plan	\$ 4,466.42
	1.1.2.3	Etnography, institutional analisis, Policy Analysis, Sustainable livelihood analysis, secondary data study on watershed area	\$ 4,466.42
	1.1.2.4	Conservation and biodiversity study on the Watershed area	\$ 4,466.42
	1.1.2.5	Assesment PES (payment ecosystem services)	\$ 4,466.42
	1.1.2.6	Resilience, vulnerability assesment on disaster and climate change impact	\$ 4,466.42
	1.1.2.7	Land use assesmnet (FGD on land use history of village and watershed area)	\$ 4,466.42
	1.1.2.8	Establishment of participatory land use mapping team	\$ 5,432.83
	1.1.2.9	Participatory mapping training	\$ 5,850.75
	1.1.2.10	Land use participatory mapping	\$ 52,686.57
	1.1.2.11	Area and village land use map making	\$ 17,888.06
	1.1.2.12	Workshop on land use mapping result	\$ 2,829.85

	1.1.2.13	Workshop on preparation of integrated watershed management plan document framework and climate adaptation action plan formulation	\$ 1,677.24
	1.1.2.14	Series of workshop on formulating integrated watershed management plan and climate change adaptation action plan	\$ 59,974.25
	1.1.2.15	Public consultation integrated watershed management and climate change adaptation action plan document	\$ 3,215.30
	1.1.2.16	Evaluation	\$ 343.28
Component 2: Promoting and practicing sustainable livelihood adaptive to climate change at the three watershed landscapes in the Indigenous People of Ammatoa Kajang customary area.			\$ 615,105.23
Outcome	2.1	Resilience of people in Indigenous people of Ammatoa Kajang customary area enhanced and vulnerability to climate risk reduced	\$ 615,105.23
Output	2.1.1	Climate adaptive sustainable livelihood models practiced at 14 villages in 3 watershed landscape in Indigenous People of Ammatoa Kajang customary area	\$ 601,978.36
Activity	2.1.1.1	Agroforestry field school	\$ 50,649.25
	2.1.1.2	Agroforestry Demonstration plot making	\$ 45,149.25
	2.1.1.3	Establishment of Climate resilience women group	\$ 5,432.84
	2.1.1.4	Series of FGD with climate resilience women group at 14 villages (3 times each village)	\$ 16,298.51
	2.1.1.5	Yard gardening field school	\$ 28,835.82
	2.1.1.6	Yard gardening implementation by climate resilience women group at 14 villages	\$ 26,119.40
	2.1.1.7	Biomass stove procurement for women group at 14 villages	\$ 19,589.55
	2.1.1.8	Training on using biomass stove for women group at 14 villages	\$ 7,235.07
	2.1.1.9	Goat Livestock field school	\$ 104,138.06
	2.1.1.10	Goat procurement for farmer group	\$ 77,940.30
	2.1.1.11	Goat stall/shelter making	\$ 33,380.60
	2.1.1.12	Training on making organic fertilizer from goat dung	\$ 8,358.21
	2.1.1.13	Field School on System of Rice Intensification (SRI)	\$ 58,550.37
	2.1.1.14	SRI Practicing/implementation	\$ 2,942.91
	2.1.1.15	FGD with farmers for Seed bank preparation	\$ 2,085.82
	2.1.1.16	Seed bank development	\$ 6,791.05
	2.1.1.17	Field school banana cultivation	\$ 42,582.09
	2.1.1.18	Banana cultivation	\$ 20,320.90
	2.1.1.19	Series of integrated pest management (6x)	\$ 45,578.36

Output	2.1.2	Environment conservation to support sustainable livelihood adaptive to climate change done on three watersheds in Ammatoa Kajang customary area	\$ 13,126.87
Activity	2.1.2.1	Soil and water conservtion training	\$ 10,231.34
	2.1.2.2	Terasering demonstration plot for soil and water conservation	\$ 2,552.24
	2.1.2.3	Evaluation	\$ 343.29
Component 3: Lobbying and Policy Advocacy for climate adaptive sustainable integrated watershed management and Climate Adaptation Action plan to regency government of Bulukumba and South Sulawesi Provincial government.			\$ 78,088.43
Outcome	3.1	Pro-climate integrated watershed management and climate change action plan integrated into regency development plan	\$ 78,088.43
Output	3.1.1	Head of Regency regulation on watershed management and climate adaptation action is signed and released	\$ 11,750.37
Activity	3.1.1.1	Series of discussion of multisatkeholders watershed management coordination forum to formulate and finalizing regent regulation on integrated watershed management and climate adaptation action plan(10 times)	\$ 7,919.40
	3.1.1.2	Public consultation of regent regulation on integrated watershed management and climate adaptation action plan of Bulukumba regency	\$ 3,177.98
	3.1.1.3	legalization of Regent regulation on Integrated watershed management and climate adaptation action plan	\$ 652.99
Output	3.1.2	Pro-climate integrated sustainable watershed management programs budgeted in the annual regency budgeting and climate adaptive budgeting put into regency annual budgeting	\$ 66,338.06
Activity	3.1.2.1	Formation of revision team / draft maker of Pro Climate Change Adaptation Village development planning (RPJMDes) at 14 villages.	\$ 2,726.87
	3.1.2.2	Series of discussions and finalization of revision / drafting of Pro Climate Change Adaptation Village development planning (RPJMDes) at 14 villages.	\$ 50,133.58
	3.1.2.3	Public consultation of Pro Climate Change Adaptation Village development planning (RPJMDes)	\$ 10,343.28
	3.1.2.4	Roadshow to internalize the integrated watershed management framework to the provincial government development plan (Governor, Bappeda, DLHK, BP-DAS LH)	\$ 2,791.05
	3.1.2.5	Evaluation	\$ 343.28
Component 4: Raising awareness, knowledge management and disseminating informtion on the importance of watershed and climate change impact to the Indigenous People of Ammatoa Kajang customary area			\$ 56,451.49
Outcome	4.1	The value of watershed and impacts of climate change are understood by local people	\$ 56,451.49
Output	4.1.1	Knowledge of local people on the importance of watershed and climate change impact increased	\$ 46,802.24

Activity	4.1.1.1	KAP Baseline and end line survey	\$ 31,343.28
	4.1.1.2	Awareness rising campaign	\$ 7,623.14
	4.1.1.3	Academic writing and project lesson learned book	\$ 7,835.82
Output	4.1.2	Project information disseminated	\$ 9,649.25
Activity	4.1.2.1	villagers discussion forum on watershed management and climate change	\$ 2,216.42
	4.1.2.2	project dissemination seminar	\$ 1,865.67
	4.1.2.3	Evaluation	\$ 343.28
	4.1.2.4	Monev Kemitraan	\$ 5,223.88
A. Total Project Execution Cost (PEC) and M&E Cost			\$ 98,503.09
	A1	Program Leader	\$ 7,611.94
	A2	Program Coordinator	\$ 6,268.66
	A3	Knowledge Management Officer & Capacity Building Specialist	\$ 2,686.57
	A4	Gender specialist	\$ 2,686.57
	A5	Finance & Admin Officer	\$ 5,373.13
	A6	Village Facilitator Salary	\$ 37,611.94
	A7	Logistic, lodging and transportation for village facilitators	\$ 11,883.94
	A8	Office Support	\$ 13,029.60
	A9	Monitoring & Evaluation (Kemitraan)	\$ 11,350.74
B. Project/Programme Cycle Management Fee charged by the Implementing Entity			\$ 88,134.83
Amount of Financing Requested			\$ 1,125,015.16

Budget Notes & Justification

Output & Activity	Description of budget item	Notes/Justification
<p>Output 1.1.: Multi-stakeholders watersheds management forum established at three watersheds inside the Indigenous People of Ammatoa Kajang customary area.</p> <p>The establishment of the forum is important as through this forum it is expected that it can become a forum to discuss issues and setting action agenda of the ecological crisis in one landscape that has been affecting the Indigenous People of Ammatoa Kajang. This forum will consist of all stakeholders from village government level, sub-district to regency level.</p>		
Activity		
Project Team Orientation	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service 	<p>This activities is important for setting up the knowledge of the project team towards the project, orienting the all the involved project staff with the project objectives, expected project result and impact, the project outputs and activities, as well as the project logical framework that resulted on the comprehensive understanding of all the involving person on the project in whole. The orientation also will discuss the workplan of the project.</p>
Program socialization & Kickoff	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Banner printing - Local transport - Kemitraan team airfare - Kemitraan team local transportation - Kemitraan team lodging and accommodation 	<p>The project socialization and kick off meeting is important as precursor of project implementation; this meeting is important to give information to the all relevant stakeholder about the project and the starting of the project.</p>
Series of multi stakeholder workshop for establishing watershed management coordination forum and formulating forum work plan	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport - Resource person fee - Resource person transportation cost - Meals & Refreshment resource - Resource person accomodation 	<p>The series of workshop is important for commitment building of the stakeholders and levelling perspective of all stakeholders.</p> <p>It is also will be the foundation for involving stakeholders in establishing the forum and formulating plans for the integrated management of 3 watersheds inside the Indigenous People of Ammatoa Kajang Customary Area.</p>

	- Stationary	
Watershed management multi-stakeholder coordination forum legalization	- Transportation - Local transport	<p>The activity is the lobby activity with the regency authority i.e. head of regency of Bulukumba, it will result the decision letter of head of regency on the watershed management coordination forum. The lobbying process will be done by 5 person as representatives of the forum. The lobby activities will be done 10 times with the series of meeting with the district government officers (head of district, vice head of district, district development agency, etc). the cost allocated for transportation cost for lobbyist. This activity will be done during first quarter of the project.</p> <p>This legalization through regency decision letter is needed to bind the parties within the forum so that it has a legal basis in carrying out the functions of coordination, implementation and evaluation of activities during the process of formulating the integrated watershed management plan and climate change adaptation action plan.</p>
<p>Output 1.2: Watersheds governance planning and action documents formulated and agreed among stakeholders.</p> <p>The set of activities under this output are the activities to do studies/assessments. The result of the assessment will be the base and materials for formulating the action plan. the action plan is important part for the climate change adaptation and integrated watershed management. The action plan formulated will be the district level climate change adaptation action plan, it will be included actions, targets and strategies of the regional government for climate change adaptation as well as include the regional government policy, institutions and activities related to the climate change adaptation at the regional level. Besides the climate change adaptation action plan, the integrated watershed management also will be produced under this output. The action plan will contribute to improvement of the management and governance of the watershed and the efforts for climate change adaptation that ultimately will strengthen the resilience of the community toward the climate change impact.</p>		
Activity		

Workshop on preparation for study for formulating integrated watershed management plan and climate adaptation action plan	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	it is an important activity to plan the studies and assessment that are needed for formulating the climate change adaptation plan and integrated watershed management action plan. the cost allocated for meeting supplies and local transport for participants.
Workshop for making instrument for study for formulating integrated watershed management plan and climate adaptation action plan	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	The workshop is to prepare the study instrument. It will be done at each of 14 villages. The costs are allocated for the budget will be dedicated for meals and meeting room rents & cleaning service (that will be include meeting stationary and equipment) and local transport. It cost \$ 4462 for all 14 villages or \$ 319 per village; this amount of budget is considered low; yet effective to support the output achievement. This activity is important to discuss and prepare the instrument for the studies/assessments needed for action plan formulation.
Ethnography, institutional analysis, Policy Analysis, Sustainable livelihood analysis, secondary data study on watershed area. FGD and interview	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	This study is to get deep and comprehensive understanding on the context of the watershed area in term of cultural, economic, policy, and institutional aspect, as well as the climate change issue. The study will be done at each of 14 project villages. The costs are allocated for fieldwork data collection (FGD and interview). It cost \$ 4462 for all 14 villages or \$ 319 per village; this amount of budget is considered low; yet effective to support the output achievement. This study become important as the integrated watershed management and climate change adaptation plan formulation need the contextual and timely data and information
Conservation and biodiversity study on the Watershed area. FGD and interview	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	This study is to get deep and comprehensive understanding on the context and the situation of Conservation and biodiversity study on the Watershed area. FGD and interview in the watershed. The study will be done at each of 14 project villages. The costs are allocated for fieldwork data collection (FGD and

		interview). It cost \$ 4462 for all 14 villages or \$ 319 per village; this amount of budget is considered low; yet effective to support the output achievement. This study become important as the integrated watershed management and climate change adaptation action plan formulation need the contextual and timely data and information related to the conservation and biodiversity study on the Watershed area. FGD and interview.
Assessment PES (payment ecosystem services). FGD and interview	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	The study is to know the perspective of the community on the application of the concept of environmental services payment that connects the upstream, middle and downstream watershed areas. This will determine whether such scheme is possible to be applied at the area, and need to be included in the integrated watershed management plan. with that reason this study become important.
Resilience, vulnerability assessment on disaster and climate change impact. FGD and interview	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	This study is important in order to know the context of resilience, vulnerability of the community toward disaster and climate change impact of the people around the watershed area. Such data and information is essential for formulating the integrated watershed management plan and climate change adaptation action plan.
Land use assessment (FGD on land use history of village and watershed area)	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	To understand the history of land use, changes in cropping patterns, commodity history, changes in land cover from year to year, and community livelihood strategies in each phase of the change. Such data and information is very important for formulating the integrated watershed management plan and climate change adaptation action plan.
Establishment of participatory land use mapping team	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	The activity is the meeting for mapping team forming
Participatory mapping training	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport - Expert fee 	The training for participatory mapping activity, it will train villagers who have formed the mapping team how to do mapping (using tools, processing data, and presenting the result/map).

	<ul style="list-style-type: none"> - Transportation cost for expert - Meals & Refreshment expert - Seminar kit 	
Land use participatory mapping	<ul style="list-style-type: none"> - Meals & Refreshment - Local transport - GPS Procurement - Ecological survey 	This activity is to map and to know the land use pattern, land coverage, the springs, distribution areas and disaster-prone zones (floods, landslides) to be used for formulating integrated watershed management plan and climate change adaptation action plan. such data and information is essential to the planning formulation.
Area and village land use map making	<ul style="list-style-type: none"> - Expert fee - Map printing cost - Pembuatan peta 3D 	This map is made as a basis for the study of the landscape, indigenous territories and villages area within the watershed area. The map will show the spatial context of the area that will be very important for planning the integrated watershed management and climate adaptation action plan.
Workshop on land use mapping result	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport - Expert fee - Transportation cost for expert - Meals & Refreshment expert - Stationary 	The workshop is to disseminate information and clarification on the map that have been made, it will involve widely the community members. This is to present the result of participatory mapping to related parties about the condition of the landscape in 3 watersheds, which form the basis for the formulation of integrated watershed management documents and climate change adaptation action plans.
Workshop on preparation of integrated watershed management plan document framework and climate adaptation action plan formulation	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Banner printing - Local transport 	The workshop is the initial multi stakeholder workshop for preparation of action plan formulation. This activity focuses on preparation of framework of integrated watershed management plan documents and climate change adaptation action plans in the 3 project watersheds. This is aiming also aiming at the parties understood their respective roles and functions in the formulation of the document.
Series of workshop on formulating integrated watershed management plan and climate change adaptation action plan	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Expert fee - Transportation cost for expert 	This is the series of workshop on formulating the action plan. This activity is the process of formulating the integrated watershed management documents and climate change adaptation action plans. The document produced will became a reference for the parties in

	<ul style="list-style-type: none"> - Lodging for expert - Expert accommodation - Expert airfare - Local transport - Stationary 	implementing the program of activities in the villages in 3 watershed areas in the future.
Public consultation integrated watershed management and climate change adaptation action plan document	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Banner printing - Local transport - Kemitraan team airfare ticket - Kemitraan team local transport - Kemitraan team lodging and accomodayion 	The activity is the meeting with public and all relevant stakeholders that discuss the action plan that have been formulated. This activity is to convey to all parties about the integrated watershed management plans and climate change adaptation actions in 3 watersheds that have been formulated so that they can be used as a reference in formulating program activities. This is also is the opportunity to get feedback from all related parties to improve the documents and plans.
Evaluation	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service 	To evaluate the progress and achievement of all activities under the output, and to see how it can be improved. The evaluation will involve the all project staff.
<p>Output 2.1: Climate adaptive sustainable livelihood models practiced at 14 villages in 3 watershed landscape in Indigenous People of Ammatoa Kajang customary area.</p> <p>The activities under this output is to support the livelihood of the community inside the watershed. The livelihood models promote are the climate adaptive livelihoods</p> <p>This sustainable livelihood activities are expected to increase economic resilience of the household that ultimately contribute to the strengthening of the community resilience toward climate change impact.</p> <p>In the long run all the activities aggregately are expected to give economic return in total around Rp. 34,502,000,000 (\$.2,464,428) in two years of project cycle with comparison to the amount of investment to this output around Rp. 8,427,692,000 (\$.601,978..)</p>		
Activity		
Agroforestry field school	<ul style="list-style-type: none"> - Meals & Refreshment - Local transport - Meeting room rent & Cleaning Service - Resource person fee - Resource person transportation cost - Resource person lodging - Tools & equipment 	This activity is to increase community capacity on agroforestry and to give understanding on the importance of cultivating many types of plants in one complex. The agroforestry (crop mixing) is a livelihood strategy. In addition, the agroforestry also is to restore the carrying capacity of degraded environments so that agriculture can be sustainable. So this is important not only because it can

	<ul style="list-style-type: none"> - Stationary 	<p>support the livelihood of villagers but also can contribute to the improvement of environment.</p> <p>The agroforestry promotion is done through learning process on Farmer Filed School mode.</p>
Agroforestry Demonstration plot making	<ul style="list-style-type: none"> - Nursery house - Nursery - Seed maintenance - Planting - Land rent 	<p>This is to set the demonstration plot on agroforestry as the example for the wider community members to see. It is to support the promotion of agroforestry system at the watershed area.</p>
Establishment of Climate resilience women group (14 villages)	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	<p>This activity is to form a climate resilience women group. It is important to organize vulnerable women and households exposed to the risks of the climate change. The group formed is the effort of woman in facing the economic difficulties of the family in the midst of the difficulties of family livelihoods due to the effects of climate change. The group later on will organize activities related to the household livelihood improvement. The role and activities of the women group will be adjusted to the gender role context so it will not in contrary give extra burden to the women involved.</p>
Series of FGD with climate resilience women group at 14 villages (3 times each village)	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	<p>The fgd's are to discuss with women about climate change issue and the role of women for climate change adaptation, this is also to formulate the activity that will be done by the women group at each village. It is important to understand the economic conditions of the family and the risks of women facing the impacts of climate change.</p>
Yard gardening field school	<ul style="list-style-type: none"> - Meals & Refreshment - Local transport - Meeting room rent & Cleaning Service - Resource person fee - Resource person transportation cost - Resources person lodging - Tools & equipment - Stationary 	<p>Field school on yard gardening with women group (vegetables for family daily needs) is to increase the capacity of women in managing the yard and knowing the importance of using the yard for the family. The yard gardening is expected to contribute to the household livelihood improvement. It can reduce the expenditure of household by not buying daily need such as vegetables and condiments. It is ultimately will contribute to the household economic resilience.</p>
Yard gardening implementation by climate	Cultivation cost	<p>Making garden at the house yard of the women group members. It will cultivate vegetables and daily used</p>

resilience women group at 14 villages		condiment. It is expected will reduce household expenditure that will contribute to livelihood improvement.
Biomass stove procurement for women group at 14 villages	Bio-mass stove procurement	This is to promote the use of bio mass stove. With bio-mass stove the household can save expenses for energy usage every month. This will contribute to the household livelihood improvement.
Training on using biomass stove for women group at 14 villages	<ul style="list-style-type: none"> - Meals & Refreshment - Local transport - Meeting room rent & Cleaning Service - Resource person fee - Resource person transportation cost - Resources person lodging 	This activity is to train the household how to use the bio-mass stove, and to get to understand the advantages and disadvantages of using the bio-mass stove.
Goat Livestock field school	<ul style="list-style-type: none"> - Meals & Refreshment - Local transport - Meeting room rent & Cleaning Service - Resource person fee - Resource person transportation cost - Resources person lodging - Tools & equipment - Grass chopping machine - Stationary 	The goat livestock development is part of the integrated farming effort that is promoted. The animal husbandry (goat livestock) can be a livelihood strategy for households that have narrow land and unproductive land and when facing the crop failure, that often happen as the impact of the climate change. The livestock can be the back up for the urgent household economic need. The livestock will support the agriculture and vice versa; the animal feed is taken from agricultural waste, while the manure can be processed into organic fertilizer for agricultural crops. It will reduce the agriculture production cost, that also ultimately will contribute to the household economic improvement.
Goat procurement for farmer group	<ul style="list-style-type: none"> - Female goats - Male goats 	This activity is the procurement of goats for farmer groups to support the goat livestock development activity. The type of goat that will be bought is the Donggala goat. The Donggala goat is a goat that has long been bred by the people of South Sulawesi so that it can tolerate to weather and environmental local conditions.
Goat stall/shelter making	<ul style="list-style-type: none"> - Tools & equipments - Meals & Refreshment 	This is to support the goat livestock development. It will be collective stall. The making of collective goat stall also is an effort to encourage the beneficiary groups to work collectively. Working collectively will make the breeding and caring of the livestock easier. With collective stall also can supply enough the goat dung for compost fertilizer.

Training on making organic fertilizer from goat dunk	<ul style="list-style-type: none"> - Meals & Refreshment - Local transport - Meeting room rent & Cleaning Service - Resource person fee - Resource person transportation cost - Resource person lodging - Tools & equipment - Stationary 	This is to support the integrated farming, the goat livestock groups are trained for making organic fertilizer, the use of organic fertilizer and how the goat manure can be sold to be economical as compost. Besides being sold, it is also used in the gardens of group members to reduce expenses to buy fertilizer, it is environmentally friendly. The organic fertilizer will also be used by the women group on the yard gardening.
Field School on System of Rice Intensification (SRI)	<ul style="list-style-type: none"> - Meals & Refreshment - Local transport - Meeting room rent & Cleaning Service - Resource person fee - Resource person transportation cost - Resource person lodging - Tools & equipment - Stationary 	Farmer Field School on system of rice intensification (SRI) as adaptive method of paddy cultivation. The SRI system is the rice cultivation system that is known as conservation technique. It uses less water, low production cost, implementing organic method, use less seeds and fertilizer, with good yield. This method is suitable for use in Ammatoa Kajang customary areas that lack of water. By promoting this technique and practicing by farmers; it will contribute to farmers household livelihood improvement, as well as will contribute to the environment conservation. The SRI is also known for very less GHG emission comparing to the conventional method; it is because with SRI use less water and less nitrogen chemical fertilizer.
SRI Practicing/implementation	<ul style="list-style-type: none"> - Seeds procurement - Nursery - Land preparation - Planting 	This activity is setting the demo-plot of SRI method. This practice is an adaptive effort to rice fields that lack of water while at the same time can reduce the use of seeds and fertilizer. This is done as a model to encourage farmers who had been using conventional rice cultivation practices.
FGD with farmers for Seed bank preparation	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	This activity is the FGD activity to discuss about the making of seed bank. It is important to identify local seeds in the Ammatoa Kajang customary area. In this FGD, the community will understand the important of the seed bank to be made, as well as what seeds that will be stored in the seed bank. The local seeds as scientifically proven are more resilience to the climate change effect and known to be more adaptive rather than the hybrid seeds, that's why it is important to identify and do effort to preserve the local seeds.
Seed bank development	<ul style="list-style-type: none"> - Making seed bank - Collecting seeds 	Seeds bank development is an adaptive effort to overcome the problems of hybrid seed. Local seeds are more adaptive to climate change. Besides that the hybrid seeds are

	<ul style="list-style-type: none"> - Developing seeds - Maintenance of seeds - Local seeds campaign 	expensive and many times are not available when it is needed by the farmers.
Field school banana cultivation	<ul style="list-style-type: none"> - Meals & Refreshment - Local transport - Meeting room rent & Cleaning Service - Resource person fee - Resource person transportation cost - Resource person lodging - Tools & equipment - Stationary 	This activity is the Field School on Banana cultivation. to provide knowledge about banana plant that are resistant to drought. The field school also will give knowledge to villagers on pest and disease and how to control. The banana cultivation promotion is the effort for developing a model for household income diversification. Banana according to villagers is plant that very adaptive to weather, it can resist the drought and flood; so it is one of the adaptive plant. In addition banana cultivation development as a model of household income diversification is expected to contribute to the household livelihood, it is expected provide alternative income to the household. It will ultimately contribute to the economic resilience of the community and the community resilience in a whole toward climate change impact.
Banana cultivation	<ul style="list-style-type: none"> - Seedling - Meals & refreshment 	The activity is to buy the banana seeds and planting activity.
Series of integrated pest management training (6x)	<ul style="list-style-type: none"> - Meals & Refreshment - Local transport - Meeting room rent & Cleaning Service - Resource person fee - Resource person transportation cost - Resource person lodging - Tools & equipment - Stationary 	This activity is the training for villagers for pest and disease control. It will be applicable to yard gardening, banana, agroforestry, SRI, and Goat livestock development, it will be done where applicable and needed by villagers.
Output 2.2.: Environment conservation to support sustainable livelihood adaptive to climate change done on three watersheds in Ammatoa Kajang customary area.		
Activity		
Soil and water conservation training	<ul style="list-style-type: none"> - Meals & Refreshment - Local transport - Meeting room rent & Cleaning Service - Resource person fee 	This activity to build adaptive capacity of communities in 6 villages to practice soil and water conservation in their gardens. It is hoped that the community will have concerns about the importance of land and water conservations to help restore the environment.

	<ul style="list-style-type: none"> - Resource person transportation cost - Resource person lodging - Tools & equipment - Stationary 	
Terasing demonstration plot for soil and water conservation	<ul style="list-style-type: none"> - Meals & Refreshment - Local transport - Tools & equipment 	This activity is the demonstration of soil and water conservation practices in the upstream and middle stream area of three watersheds. The terracing practice will be carried out in 6 villages to restrain the rate of surface water and help water absorb into the soil. So that it can provide benefits for sustainable agriculture.
Monitoring & Evaluation	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service 	To evaluate the progress and achievement of all activities under the output, and to see how it can be improved. The evaluation will involve the all project staff.
<p>Output 3.1.: Head of Regency regulation on watershed management and climate adaptation action is signed and released.</p> <p>The policy advocacy is very important for the project. with the supportive policy the integrated management of watershed and climate change adaptation effort can be done. The resilience of the community toward climate change impact at the three watershed inside the indigenous people of Ammatoa Kajang Customary Area can be strengthened with supportive policy of government. The supportive policy can be seen from the regency development plan that is pro climate change adaptation and pro to the integrated watershed management, as well as the budget allocation support for those issues.</p>		
Activity		
Series of discussion of multi stakeholders watershed management coordination forum to formulate and finalizing regency regulation on integrated watershed management and climate adaptation action plan (10 times)	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Resource person fee - Resource person transportation cost - Resource person lodging - Resource person accomodation - Local transport - Stationary 	The series of discussion to prepare and lobby the regency authority for integration the action plan of watershed into regency development plan. This activity is process in making Bulukumba regency government regulations on integrated watershed management and climate change adaptation actions plan.
Public consultation of regency regulation on integrated watershed management and	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Banner printing - Local transport 	The public meeting to discuss and disseminate the regent regulation on integrated watershed management and climate change adaptation action plan. This activity is important to be carried out to notify and disseminate the public about regulations regarding integrated watershed

climate adaptation action plan of Bulukumba regency	<ul style="list-style-type: none"> - Kemitraan team airfare ticket - Kemitraan team local transport - Kemitraan team lodging 	management and climate change adaptation actions plan. It is expected that the stakeholders make it as a legal basis to run integrated programs.
legalization of Regency regulation on Integrated watershed management and climate adaptation action plan	<ul style="list-style-type: none"> - Transports - Local transport 	the activity is the lobby activity with the regency authority i.e. head of regency of Bulukumba. This regulation is very important for the parties, especially the Bulukumba regency government offices and target villages as a legal basis in designing activities that can support integrated watershed management and climate change adaptation actions plan in 3 watersheds.
Output 3.2..: Pro-climate integrated sustainable watershed management programs budgeted in the annual regency budgeting and Climate adaptive budgeting put into regency annual budgeting		
Activity		
Formation of revision team / draft maker of Pro Climate Change Adaptation Village development planning (RPJMDes) at 14 villages.	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	This is to form the team for village mid-term development plan (RPJMDes) revision and synchronization with the integrated watershed management and climate change adaptation action plan. This team will be in charge of the process of preparing RPJMDes that are adaptive to climate change and support the integrated watershed management.
Series of discussions and finalization of revision / drafting of Pro Climate Change Adaptation Village development planning (RPJMDes) at 14 villages.	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport - Resource person fee - Resource person transportation cost - Resource person lodging - Resource person accomodation - Stationary 	The RPJMDes Revision Team will do village assessment and explore community ideas from the neighbourhood, hamlet to village level in each of the 14 project target villages. After that, they will compile and revise the village mid-term development plan (RPJMDes) so that it is adaptive to climate change.
Public consultation of Pro Climate Change Adaptation Village development planning (RPJMDes)	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	The activity is the meeting with public and all relevant stakeholders that discuss the village development plan that have been formulated. This activity will be carried out in 14 project target villages to inform the community and the government of Bulukumba Regency about the RPJMDes that are adaptive to climate change. This is an effort to synchronize the development planning from village level to district level.

Roadshow to internalize the integrated watershed management framework to the provincial government development plan (Governor, Bappeda, DLHK, BP-DAS LH)	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport - Kemitraan team airfare ticket - Kemitraan team local transport - Kemitraan team lodging 	The activity are the meeting with all relevant public authorities at the provincial level to disseminate and lobby the provincial government to integrated the action plan into the provincial development activities. This roadshow is a form of presentation so that the parties at the provincial level understand about the existence of integrated watershed management plans and climate change adaptation action plans in Bulukumba Regency. This activity seeks to build strong collaboration between district and provincial governments to synchronize the programs that can improve the management and governance of the 3 watershed areas.
Monitoring & Evaluation	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service 	To evaluate the progress and achievement of all activities under the output, and to see how it can be improved. The evaluation will involve the all project staff.
Output 4.1.: Knowledge of local people on the importance of watershed and climate change impact increased		
Activity		
KAP Baseline and end line survey	<ul style="list-style-type: none"> - Questionnaire - Enumerator - Spot-checker 	This survey was conducted to measure the community's understanding and perspective on climate change and the watershed in the project target area. The result of the survey will be the baseline data for the project. The survey will measure the knowledge, attitude, and practice of the community before and after the project intervention related to the climate change adaptation.
Awareness rising campaign	<ul style="list-style-type: none"> - Leaflets Printing - Flyers Printing - T-shirts - Radio and printed media campaign - District seminar moderator fee - Sound system rent for district seminar - District seminar chairs and tables rent. - Refreshment 	This is the activity for the awareness rising camping on the importance of watershed ecosystem and the climate change issue. It is an effort to disseminate information about climate change risk awareness in Bulukumba Regency. This is expected to be a learning process for the public, especially the people of Bulukumba Regency.
Academic writing and project lesson learn book	<ul style="list-style-type: none"> - book printing - Book writer - academic article writer 	The book and academic articles are an attempt to document all lessons learned during the project. It is hoped that this book can be an inspiration or lesson for individuals, groups, NGOs, academics and government on the issue of

		integrated watershed management and climate change adaptation especially for the local context.
Output 4.2.: Project information disseminated		
Activity		
villagers discussion forum on watershed management and climate change	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Local transport 	This is the effort to discuss and disseminate the information and knowledge on the importance of watershed and climate change issue at the community level. This discussion forum is a forum to build citizen awareness about the importance of watershed management and understanding climate change conditions. This is a form of education for villagers move together for betterment of environment.
project dissemination seminar	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service - Banner printing - Local transport 	This is the activity to disseminate the information about the project, achievements, lesson learn, recommendation, etc.
Monitoring & Evaluation	<ul style="list-style-type: none"> - Meals & Refreshment - Meeting room rent & Cleaning Service 	To evaluate the progress and achievement of all activities under the output, and to see how it can be improved. The evaluation will involve the all project staff.
Monev Kemitraan	<ul style="list-style-type: none"> - Final Project Survey - Report reviews, interviews, PMU FGD - Monev workshop 	
Project/Program Execution Cost		
Salary	Program Leader	He/she will dedicate full time for the project with salary of Rp. 4.250.000 (\$.317) per month. It will responsible for managing the project. Program leader responsible to ensure the quality of program is run well based on work plan, time schedules and cost. Complement the progress report, programme report.
	Program Coordinator	She/He will dedicate full time for the operation of the project with salary Rp. 3.500.000 (\$.261) per month. Program coordinator responsible to coordinate the

		execution of activities in the field. Responsible to the project leader, ensure the activities done as on work plan, time schedules and cost. Making report.
	Knowledge Management Officer & Capacity Building Specialist	She/He will dedicated his time on demand, there will be 8 slots for hiring the knowledge and capacity building specialist during two years of project cycle. The salary for each package of job for the specialist is Rp. 4.500.000 (\$336). The specialist Has role to facilitate the capacity building for the project staff and for the beneficiaries within the project framework.
	Gender specialist	She/He will dedicated his time on demand, there will be 8 slots for hiring the Gender specialist during two years of project cycle. The salary for each package of job for the specialist is Rp. 4.500.000 (\$336). The specialist Has role to facilitate the project staff and for the beneficiaries within the project framework for gender mainstreaming of the project operation.
	Finance & Admin Officer	She/He will dedicate full time for the salary Rp. 3.000.000 (\$224) per month. Finance Manager has role to approve and control the budget execution cost and making finance reporting and contractual cost management.
	Village Facilitator	She/He will dedicate full time for the salary Rp. 3.000.000 (\$224) per month. They will execute sets of activities, output and outcome at village level. Facilitate operation of the project such as; community development work, and programme activities reporting.
Logistic, lodging and transportation for village facilitators	Logistic, lodging and transportation for village facilitators	This is the cost for the project staff while live in at the village. It is costed Rp. 603,200 (\$24) per month.

Office Support	Office supplies	This is for monthly office supplies/running cost. It is allocated Rp. 700,000 (\$52) per month.
	Reporting	The cost is for reporting, allocated Rp. 300,000 (\$22) per month.
	Audit	The independent auditor cost Rp. 127,196,591 (\$.9492) for two times auditing (once per year).
	Office rent	Office rent for two years cost Rp. 30,000,000 (\$.2238).
Monitoring & Evaluation (Kemitraan)	Airfare ticket	Airfare ticket Jakarta-Makassar-Jakarta for 3 dedicated person from Kemitraan, it consist of 6 trips during the project time. It costs Rp. 4,000,000 (\$.298) per trip. The total budget is Rp. 72,000,000 (\$.5373)
	Accommodation	The cost is for accommodation during the monitoring and evaluation for 3 person 6 trips calculated 3 days each trip. Total cost is Rp. 32,000,000 (\$.2417).
	Local Transportation	The cost is for local transport calculated 1 unit for each trip with 6 trips during the project time, and 3 days per trips. The total cost is Rp. 10,800,000 (\$.805)
	Airport Transfer	The airport transfer for 3 person for 6 trips, the unit cost is Rp. 1,000,000 per trip x 3 person x 6 trips, the total cost is Rp. 18,000,000 (\$.1343)
	Perdiem	This is perdiem for Rp. 350,000 x 3 person x 6 trips x 3 days per trip. The total cost is Rp. 18,900,000, (\$.1410).
Project Cycle management Services		8.5% of total project financing

H. Include a disbursement schedule with time-bound milestones.

No	Description	Time Line
1	Kick off of the project	November 2020
2	One year of the project upon approval of annual report	November 2021
3	Final installment after termination of project and upon approval of final report	November 2022

	Upon signature of Agreement	One Year after Project Start	Total
Schedule	November 1,2020	November 1,2021	
Programme Cost	\$302,818.66	\$635,558.58	\$938,377.24
Project Execution Cost (PEC) and M&E Cost	\$51,143.34	\$47,359.75	\$98,503.09
Project/Programme Cycle Management Fee charged by the Implementing Entity	\$44,067.42	\$44,067.41	\$88,134.83
Total	\$398,029.42	\$726,985.74	\$1,125,015.16

Every disbursement based on the projected annual fund needed for project execution.

Time-bound Project Workplan

Component	Output	Activities	Timeframe (months)																								
			2020		2021										2022												
			11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	
1:Developing model of sustainable integrated watershed management inside the Indigenous People of Ammatoa Kajang customary area (Apparang, Baontoa and Raowa Watershed).	1.1.1: Multi-stakeholders watershed managements established at three watersheds inside the Indigenous People of Ammatoa Kajang customary area.	1.1.1.1.Project Team Orientation																									
		1.1.1.2.Program socialization & Kickoff																									
		1.1.1.3. Series of workshop for the forum establishment.																									
		1.1.1.4. The facilitation for legalizing the forum through regency decision letter (SK Bupati).																									
	1.2.2: Watersheds governance planning and action documents formulated and agreed among stakeholders.	1.1.2.1.Workshop on preparation for study for formulating integrated watershed management plan and climate adaptation action plan.																									
		1.1.2.2.Workshop for making instrument for study for formulating integrated watershed management plan and climate																									

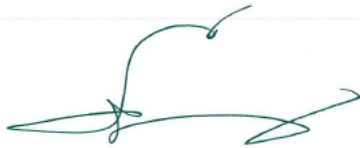
	adaptation action plan.																													
	1.1.2.3.Ethnography, Institutional analysis, Policy Analysis, Sustainable livelihood analysis, secondary data study on watershed area.																													
	1.1.2.4.Conservation and biodiversity study on the Watershed area.																													
	1.1.2.5.Assessment on possibility of PES (Payment of Ecosystem Service).																													
	1.1.2.6.Resilience, vulnerability assessment on disaster and climate change impact.																													
	1.1.2.7.Land use assessment (FGD on land use history of village and watershed area)																													
	1.1.2.8.Establishment of participatory land use mapping teamed area																													
	1.1.2.9.Participatory mapping training																													
	1.1.2.10.Land use participatory mapping																													

		1.1.2.11.Area and village land use map making																													
		1.1.2.12.Workshop on land use mapping result																													
		1.1.2.13.Workshop on preparation of integrated watershed management plan document framework and climate adaptation action plan formulation																													
		1.1.2.14.Series of workshop on formulating integrated watershed management plan and climate change adaptation action plan																													
		1.1.2.15.Public consultation integrated watershed management and climate change adaptation action plan document																													
		1.1.2.16. Evaluation																													
2: Promoting and practicing sustainable livelihood adaptive to climate change at the three	2.1.1.Climatic adaptive sustainable livelihood models practiced at 14	2.1.1.1.Agroforestry field school																													
		2.1.1.2.Agroforestry Demonstration plot making																													
		2.1.1.3.Establishment of Climate resilience																													

climate adaptive sustainable integrated watershed management and Climate Adaptation Action plan to regency government of Bulukumba and South Sulawesi Provincial government.	regulation on watershed management and climate adaptation action is signed and released.	watershed management coordination forum to formulate and finalizing regent regulation on integrated watershed management and climate adaptation action plan(10 times)																									
		3.1.1.2.Public consultation of regent regulation on integrated watershed management and climate adaptation action plan of Bulukumba regency.																									
		3.1.1.3.Legalization of Regent regulation on Integrated watershed management and climate adaptation action plan.																									
	3.1.2: Pro-climate integrated sustainable watershed management programs budgeted in the annual regency	3.1.2.1.Formation of revision team / draft maker of Pro Climate Change Adaptation Village development planning (RPJMDes) at 14 villages.																									
		3.1.2.2.Series of discussions and finalization of revision / drafting of Pro Climate Change Adaptation Village development																									

	budgeting and Climate adaptive budgeting put into regency annual budgeting	planning (RPJMDes) at 14 villages.																					
		3.1.2.3.Public consultation of Pro Climate Change Adaptation Village development planning (RPJMDes)																					
		3.1.2.4.Roadshow to internalize the integrated watershed management framework to the provincial government development plan (Governor, Bappeda, DLHK, BP-DAS LH)																					
		3.1.2.5. evaluation																					
4: Raising awareness, knowledge management and disseminating information on the importance of watershed and climate change impact to the Indigenous People of Ammatoa Kajang	4.1.1: Knowledge of local people on the importance of watershed and climate change impact increased	4.1.1.1.KAP Baseline and end line survey.																					
		4.1.1.2.Awareness rising campaign.																					
		4.1.1.3.Academic writing and project lesson learned book																					
	4.2.2: Project information	4.1.2.1.Villagers discussion forum on watershed management and climate change																					

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (President Decree No. 16/2015; P.13/MENLHK/Setjen/OTL.0/1/2016; P.33/MENLHK/Setjen/Kum.1/3/2016; Indonesia Intended Nationally Determined Contribution/INDC; COP 21; Paris Agreement signed by Government of Indonesia; Book and Map of Information System of Vulnerability Index Data (SIDIK); Permen-KP No. 2 year 2013; Climate Change Adaptation National Action Plan) and subject to the approval by the Adaptation Fund Board commit to implementing the Project in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this Project..



Laode M. Syarif
Executive Director Kemitraan
Implementing Entity Coordinator

Date: 17th Jan 2020

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