REQUEST FOR PROJECT/PROGRAMME
FUNDING FROM THE ADAPTATION FUND

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

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

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

Complete documentation should be sent to:

The Adaptation Fund Board Secretariat
1818 H Street NW
MSN P4-400
Washington, D.C., 20433
U.S.A
Fax: +1 (202) 522-3240/5
Email: afbsec@adaptation-fund.org

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-,-,** (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 Oscilation (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.

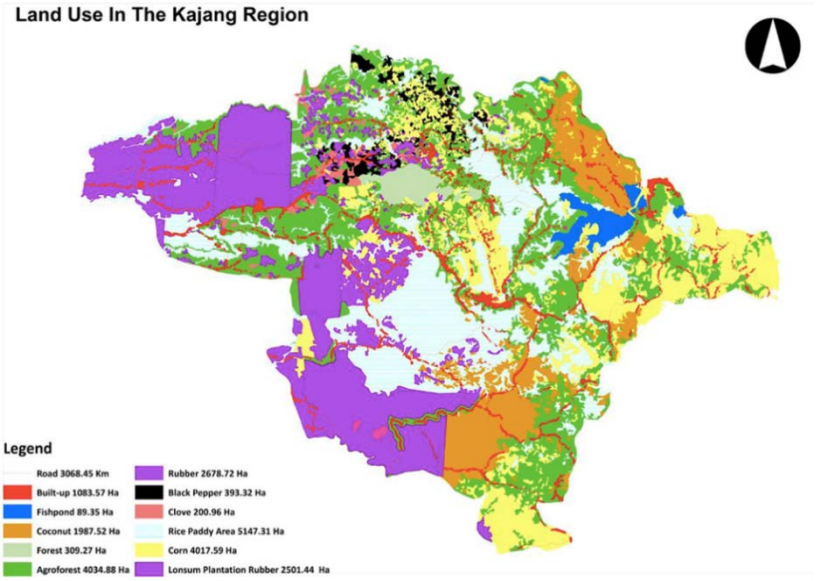
Global climate change estimated will be affecting coastal community in various part of the world. One thing that will be changed are acceleration to sea level rise which will have an impact such as drown of small islands, increased flooding, coastal erosion, sea water intrusion and changes in ecological 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)		
	low	*medium*	*hight*	*low*	*medium*	*hight*	*low*	*medium*	*hight*	*low*	*medium*	*hight*
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.

LANDSCAPE AND VULNERABILITY STATUS OF THE PROGRAM LOCATION

a. Program Area

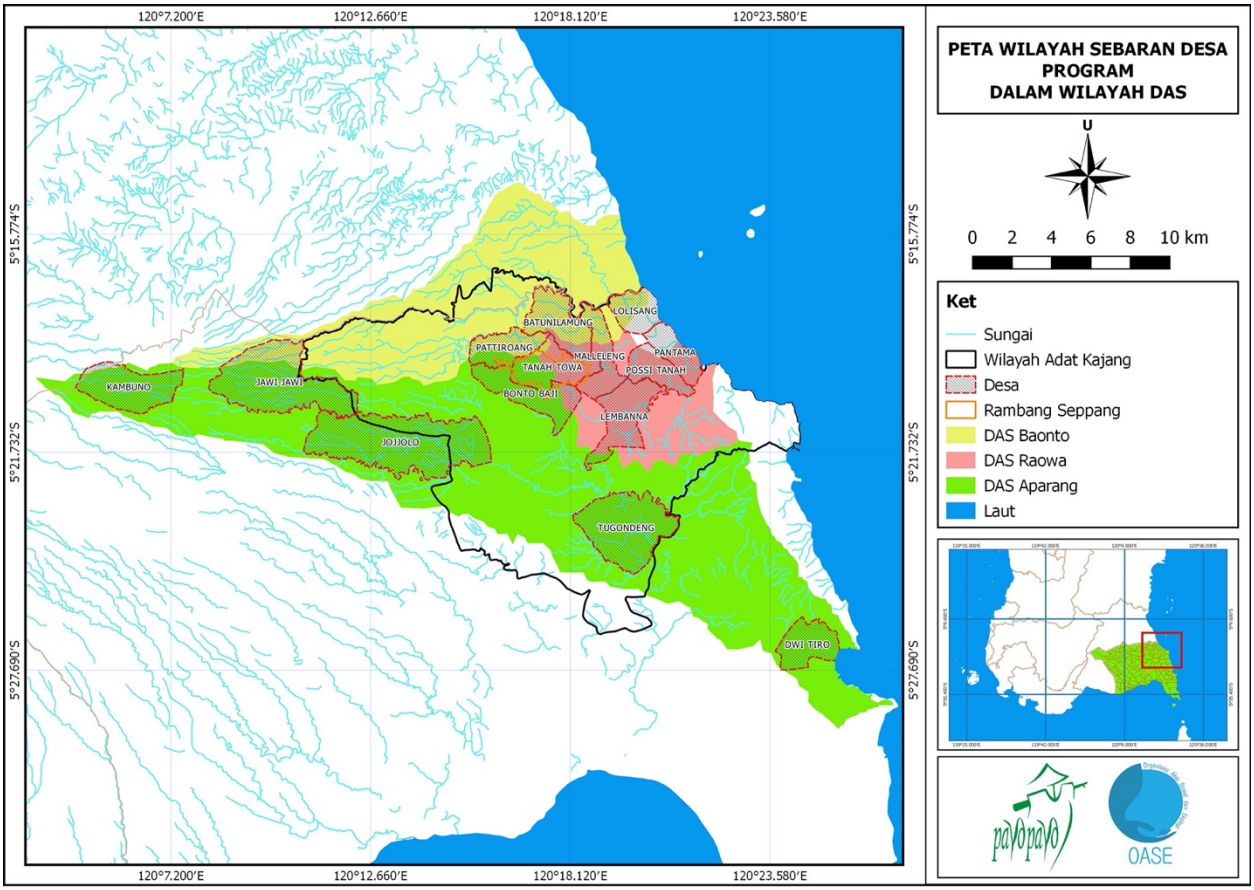
14 Villages of program location are chosen by considering the integrated (Source, Path and Receptor) aspects of 3 watershed areas in Indigenous People of Ammatoa Kajang Customary Area, Bulukumba District namely Raowa watershed (4,431 ha), Apparang watershed (23,594 ha) and Baonto watershed (9930 Ha). 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 Adaftif/IKA) (IKA) and Exposure Index and sensitivity (Indeks Keterpaparan dan senisitifitas /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.	$ 10,981.52
		Output 1.2. Watersheds governance planning and action documents formulated and agreed among stakeholders.	$ 176,845.29
Sub Total Component 1			$ 187,826.81

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.	$ 607,457.25
		Output 2.2. Environment conservation to support sustainable livelihood adaptive to climate change done on three watersheds in Ammatoa Kajang customary area.	$ 13,615.94
Sub Total Component 2			$ 621,073.19
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.	$ 12,159.06
		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	$ 67,696.38
Sub Total Component 3			$ 79,855.43
Component 4: Raising awareness, knowledge	**Outcome 4;** The value of watershed and	**Output 4.1:** Knowledge of local people on the	$ 44,927.54

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	$ 4,695.65
Sub Total Component 4			$ 49,623.19
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			$ 1,125,006.19

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 dunk
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 againt 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.

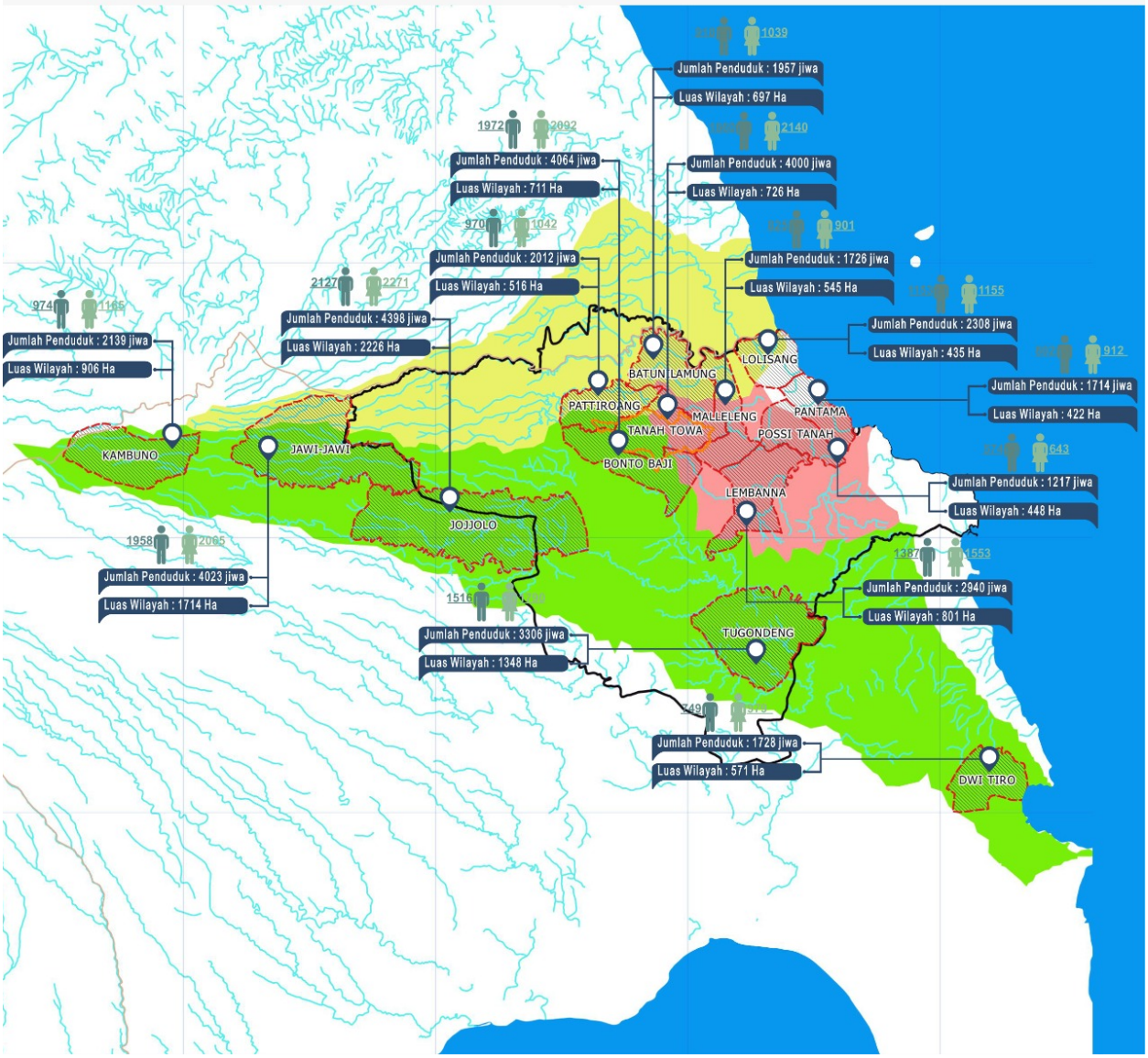
Project dissemination seminar.
The seminar event is to promote and disseminate the information about the project. it will be conducted at the regency level, it will involve all broad audience at the regency level.

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

		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.
	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 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.
	Compost hole	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

		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 id 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 involving women as protagonist group, they will be encouraging 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. **15,525,085 (US$ 1,125,006)** 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$187,826 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$ 621,073. 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$ 79,855 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$ 49, 623 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. 15,525,085 (US$ 1,125,006) 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	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. 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 mapping is around Rp.100.000.000; hence through this program it is more effective against the cost	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. 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.

	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 village spends a budget of Rp.36,405,000. Against the third party service the program cost for this activity	Same as above

	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 vegetables and ingredients. If it is counted for 900 household it will give back	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.

	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 climate change This activity will be carried out in 14 villages with the number of	The application of the SRI system to the community will increase the economics of household by an average of 3 to 4 million rupiah per family.

	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.	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.
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.	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.
Seed bank	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.	Very high cultural intangible value and benefit from the activity. It will ultimately contribute to the community resilience.
3. Pro-climate integrated watershed management and climate change action plan integrated into regency development plan.		
Policy Advocacy	For this district-level policy advocacy will spend budget Rp. 254,142,000 for the whole process.	The total regency budget to support climate change 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.*

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. 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, as showed below. If any other, further assessment will be applied.

Activity	Applicable standard	Application to project
Agroforestry	Regulation of the minister of forestry of the republic of indonesia number p.20 / menhut-ii / 20 14 concerning general guidelines for development of forestry community forestry based on conservation	Design, planning, criteria of plants, cultivation system will be adjusted accordingly to the regulation.
Integrated farming, system of rice intensification, yard gardening, banana planting.	Law #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 the regulation.
	Regulation of Ministry of Agriculture of Republic of Indonesia No. 39 2015 tentang List of prohibited Active Pesticides and Limited Pesticides	The project will not use any chemical pesticide, instead it will promote bio-pesticide.

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	

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.

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.

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.

There have been many discussion and consultation with various parties upon the preparation of the proposal, besides to gather basic information, the consultation also informally asking for agreement for possibility to apply fund for adaptation effort to tackle the community issues related to climate change. The consultation process illustrated as below:

Parties consulted	Consultation process & Issue Raised	Time	Location
The head of the Tanah Towa village and the Lembanna Village	Consultation with the village head of Tawa and Malleleng to discuss the situation in Kajang. As a village government, there has been a lot of information about the water crisis, erratic weather,	17 December 2018	Tanah Towa Village office

	crop failures faced by the community and processes of land use change in the Ammatoa Kajang Indigenous People there have been also discussion of possibility to apply for funding for adaptation project to address the issues.		
Kajang sub-district government	Consultations with the Kajang sub-district government provide much information about the situation of the villages in the Ammatoa Kajang region. from the results of the consultation we were informed about the difficulties faced by Ammatoa Kajang facing the dry season. In the dry season there are many people who buy water for household clean water needs. This reinforces the results of previous findings regarding the amount of money spent by the community to buy clean water.	18 December 2018	Kajang Sub-district office
The Environment and Forestry Office	Consultation with the head of the Department of Environment and Forestry provides information on the deteriorating conditions of the watershed in Kajang. from the results of these consultations we obtained data and information about the area of rice fields that had been turned into unproductive fish ponds. This lack of productivity is also influenced by the lack of public knowledge about pond management and the loss of mangrove forests.	19 December 2018	Environment Office Of Bulukumba regency
Office of Water Resources Management	From this consultation we obtained information about the difficulties of clean water caused by the reduction of	26 December 2018	Water resources management office of Bulukumba regency

	trees in the upstream area. At the upstream there are many changes in cropping patterns that were once long-term plants converted into short-term plants. Changes in these plants affect the decline in water discharge which has an impact on the clean water crisis in the downstream region.		
Vice head of Regency of Bulukumba≈	From this consultation, we obtained information that in Bulukumba there is no policy at the district level that can support and strengthen communities in adapting to climate change. from this consultation we also found data and information about the still weak local government in building an integrated development policy.	27 December 2018	Head of Bulukumba Regency Office
Kelompok Perempuan	FGD with women group at villages around the customary area of Ammatoa kajang, the issue emerged were about the difficulty on household income issue currently faced by family at the area, some related to the water issue for agriculture. Consequently there are many young people migrate to Southeast Sulawesi. Other issue was the price of liquid gas for cooking keep increasing, burdening family economy.	20 December 2018	Village of Pattiroang

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)
Outcome 1: Management and governance of three watersheds inside the Indigenous People of Ammatoa customary area improved.	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.	The lost from the climate risk disasters reduced, the number of peoples affected by disasters significantly reduced, the frequency of the disasters reduced.
Outcome 2: Resilience of people in Indigenous people of Ammatoa Kajang customary area enhanced and vulnerability to climate risk reduced	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. .	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.
Outcome3: Pro-climate integrated watershed management and climate change action plan integrated into regency development plan.	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.	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

Outcome 4: The value of watershed and impacts of climate change are understood by local people.	Lack of the knowledge of local community regarding to the value of watershed and climate change issue.	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.

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.

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 sustainibilty 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 Guidlines) 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
Washinton DC 20433 USA
Tel: 001-202-478-7347 afbsec@adaptation-fund.org

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law	This project is designed to implement and design a climate change action plan model that is in accordance with 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 Law No.26 of 2007 concerning Spatial Planning. In addition, this project also in line with Government Regulation (PP) No.37 of 2012, concerning integrated watershed management. 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. 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, Minister of Environment and Forestry Regulation No. 7 2018 on Guidelines for Vulnerability, risk, and climate change impact study, Technical Guidelines for Preparing Action Plans for the Sustainable Development Goals of the Ministry of National Development Planning / Bappenas in 2017, Minister of Environment and Forestry Regulation No.33 of 2016 on Guidelines for Preparing Climate Change Adaptation Actions, Directorate General of Natural Resources 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.	- None

Access and Equity	The project provides fair and equitable access to the project beneficiaries and will not be impeding access to any of the other requirements like health clean water, sanitation, energy, education, housing, safe and decent working conditions and land rights.	None
Marginalized 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.	None
Human Rights	The project does not foresee any violation of human rights	
Gender Equity 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. -	Low Management of the risk: 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.
Core Labor Rights	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. No further assessment required for compliance	None
Indigenous Peoples	The main target of the project is Indigenous People of Ammatoa Kajang	Implementation program ignore local knowledge of indigenous people. Management of the risk: The implementation of the project will always respect and consult the indigenous people knowledge as they are the main beneficiaries and key stakeholder of the project.
Involuntary Resettlement	The programme does not displace any community and hence issue of resettlement does not arise	None
Protection of Natural Habitats	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.	None
Conservation of Biological Diversity	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.	None
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	- None
Pollution Prevention and Resource Efficiency	Communities use more plastic materials in their activities	Low. Management of the risk: 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.
Public Health	No adverse impact on public health related issues is envisaged. No further assessment required for compliance	Low
Physical and Cultural Heritage	No adverse impact on cultural heritage related issues is identified. No further assessment required for compliance	None
Lands and Soil 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	None

Gender Assesment

Category	Description relevant to project	Action needed
Gender Roles	There is still views of gender stereotyping in the community	Build awareness by creating a women's versus men's daily behaviours and actions in life and how activities profile with local stakeholders
Gender activities, Practice and participation	Lack of participation of women in public activities in the community	Designing activities that ensure women can participate, for example setting time for a workshop that enable women to participate, ensure the facilitation of activity that can prevent man domination (for example the leader of a group should a woman).
Gender needs	The community members have been considering traditional gender needs in daily practices.	Responding the practical need of women and men in the project activities.
Power, Access and control of resources	There is still imbalance on power, access and control in the community.	Explain to women and men the importance of each gender on the climate adaptation effort Explain what women participation could/would have added to decision making.

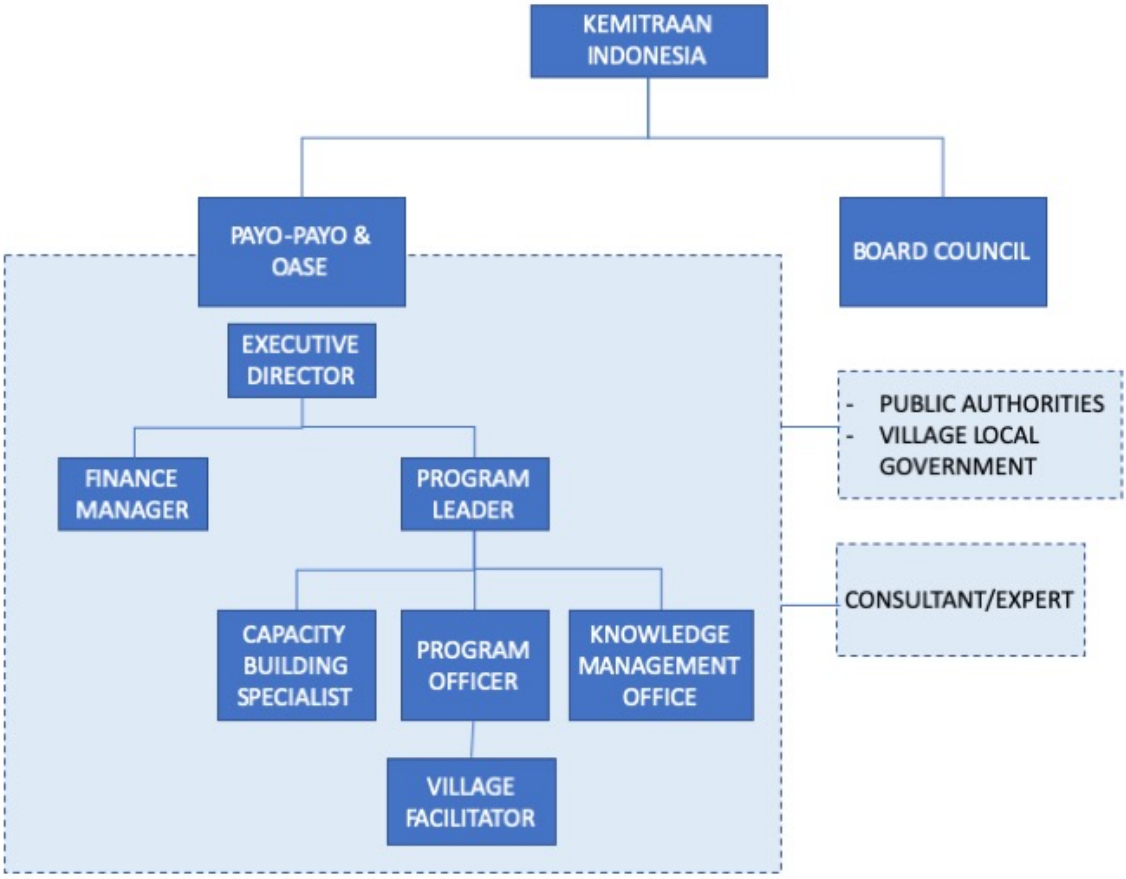
PART III: IMPLEMENTATION ARRANGEMENTS

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 Departement, 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 govermemnt 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.



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.	Coordination, implementing day to day program, making activity report.
Knowledge Management Officer	Has responsible to support the project and project facilitator for the knowledge management issue.	Coordination, implementing day to day program, making activity report.

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.

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.

It will use result based framework or logical framework approach for the evaluation

Type of M & E	Responsible parties	Budget (US$)	Timeframe
Quarterly monitoring	Project Management	200	Every quarter of project period
Half year report	Project management	400	After six month project running
Annual evaluation	Project management Community members	400	And of one project year
Project end evaluation	External evaluator Regency government Community members	1500	End of project
Financial Audit	External auditor	5000	Every year of project

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

	Indicator	Target	Milestone
Project Objective/Impact			
enhance climate resilience and build adaptive capacity toward climate change for vulnerability community through sustainable integrated watershed governance in Indigenous People of Ammatoa Kajang Customary Area in Bulukumba, South Sulawesi Province.	Decreasing of % of people impacted by the climate related disaster reduced % of people have capacity to cope with the impact of climate related risk and hazard	25 % of people at 3 watersheds area in Indigenous People of Ammatoa Kajang Customary Area. Increase to 25% from the baseline	The end of Project by 2022 The end of Project by 2022
Outcome 1:			
Reducing climate change vulnerability and risk by improving management and	% of vulnerable people to climate risk reduced in the	Reduced by 25%	The end of Project by 2022

governance of watersheds in Indigenous People of Ammatoa Kajang customary area in Bulukumba.	Indigenous People of Ammatoa Kajang. # of climate related hazard occurrence reduced at watersheds area in the indigenous People of Ammatoa Kajang area.	Reduced by 30%	The end of project by 2022
Outcome 2:			
Enhancing resilience of people in Indigenous People of Ammatoa Kajang customary area with climate adaptive sustainable livelihood development and climate mitigation actions.	% of people have economic resilience to face impact of the climate change. % and width of area mitigated from climate related risk and hazard at the 3 watershed landscape.	Increase by 25% from baseline Increase 30% from baseline	The end of project by 2022 The end of project by 2022
Outcome 3			
Advancing Sustainable Integrated Watershed Governance adaptive to Climate Change on regency development planning and development budgeting in Bulukumba regency.	Regency regulation on Climate Change Adaptation Action Plan & Integrated watershed Management is signed and released. # of government offices and agencies integrated the Climate Change Adaptation Action Plan and Integrated Watershed Management. Amount of budget allocated for Climate Change Adaptation Action Plan & Integrated Watershed Management at Regency budgeting	There is regency regulation signed and release from none At least 10 government offices and agencies 5% from the total budget of each offices and agencies	The end of project by 2022 The end of project by 2022 The end of project by 2022

Output 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	3 forum, 1 forum each watershed area At least 50 parties (government offices & agencies, village government, cso)	Mid-term of project by 2021 Mid-term of project by 2021
Output 1.2.			
Watersheds governance planning and action documents formulated and agreed among stakeholders	Formulation of watersheds governance planning Formulation of action plan for integrated watershed management	1 Document of integrated watershed management for each watershed area. 1 set of action plan for each watershed area	Mid-term of project by 2021 Mid-term of project by 2021
Output 2.1.			
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	1200 household 500 women	Mid-term of project by 2021
Output 3.1.			
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	One regency regulation from none	End of project by 2022
Output 3.2.			
Pro-climate integrated sustainable watershed management programs budgeted in the annual regency budgeting and Climate adaptive budgeting put into	# of offices Budgeted pro-climate watershed management & Climate Change Adaptation action plan	At least 10 government offices and agencies	End of project by 2022

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.	5% from the total budget of each offices and agencies	End of project by 2022
Output 4.1:			
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.	30.000 population within and around Ammatoa Kajang Customary Area.	End of project by 2022
Output 4.2:			
Project information disseminated	# of people know the project	10.000 population within and around Ammatoa Kajang Customary Area.	End of project by 2022

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)**
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.	Resilience of the Indigenous People of Ammatoa Kajang improved through sustainable integrated watershed management # of indigenous people have increased capacity and resilience toward climate related risks and hazards	Sustainable Integrated Watershed Management applied to improve resilience of community inside the Ammatoa Kajang Indigenous People customary area.	# of people have increased resilience toward climate change	**US $ 1,125,006**
Project Outcome(s)	**Project Outcome Indicator(s)**	**Fund Output**	**Fund Output Indicator**	**Grant Amount (USD)**
Outcome1: Reduced climate change vulnerability and risk by improving management and governance of watersheds in Indigenous People of Ammatoa Kajang customary area in Bulukumba.	# of vulnerable people to climate risk reduced in the Indigenous People of Ammatoa Kajang. # of climate related hazard occurrence reduced at watersheds area in the indigenous People of Ammatoa Kajang area.	**Output 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	US $ 187,826
		Output 1.2. Watersheds governance planning and action documents	Formulation of watersheds governance planning	

		formulated and agreed among stakeholders	Formulation of action plan for integrated watershed management	
Outcome 2. Enhanced resilience of people in Indigenous People of Ammatoa Kajang customary area with climate adaptive sustainable livelihood development and climate mitigation actions. .	# of people have economic resilience to face impact of the climate change. # and width of area mitigated from climate related risk and hazard at the 3 watershed landscape.	**Output 2.1.** 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	US $ 621,073.
		Output 2.2. Mitigation actions at three watersheds landscape in Indigenous People of Ammatoa Kajang customary area done.	# of mitigation action done in the 3 watershed landscape inside the Indigenous People of Ammatoa Kajang Customary area	
Outcome 3; Advanced Sustainable Integrated Watershed Governance adaptive to Climate Change on regency development planning and development budgeting in	Regency regulation on Climate Change Adaptation Action Plan & Integrated watershed Management is signed and released. # of government offices and	**Output 3.1.** 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	US $ 79,855
		Output 3.2.	# of offices Budgeted pro-climate	

Bulukumba regency.	agencies integrated the Climate Change Adaptation Action Plan and Integrated Watershed Management. Amount of budget allocated for Climate Change Adaptation Action Plan & Integrated Watershed Management at Regency budgeting	Pro-climate integrated sustainable watershed management programs budgeted in the annual regency budgeting and Climate adaptive budgeting put into regency annual budgeting	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.	
Outcome 4; The value of watershed and impacts of climate change are understood by local people.	# of people who know basic knowledge on the value of watershed and climate change issue.	**Output 4.1:** 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.	US $ 49,623
		Output 4.2: Project information disseminated	# of people know the project	

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.

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

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

	Quartal 1	Quartal 2	Quartal 3	Quartal 4	Quartal 5	Quartal 6	Quartal 7	Quartal 8	**Total**
Scheduled Date	November 1, 2020	February 1, 2021	May 1, 2021	August 1, 2021	November 1, 2021	February 1, 2022	May 1, 2022	August 1, 2022	
Amount	$ 69,754.08	$ 167,075.85	$ 326,088.31	$ 198,918.12	$ 39,198.86	$ 152,138.16	$ 124,122.86	$ 47,718.76	**$ 1,125,015**

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

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

A. Record of endorsement on behalf of the government[1] *Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:*

Tomy Satria Yulianto S.IP/ Vice District of Bulukumba	Date*: January 18, 2019*

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

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (President Decree No. 16/2015; P.13/MENLHK/Setjen/OTL.0/1/2016; P.33/MENLHK/Setjen/Kum.1/3/2016; Indonesia Intended Nationally Determined Contribution/INDC; COP 21; Paris Agreement signed by Government of Indonesia; Book and Map of Information System of Vulnerability Index Data (SIDIK); 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..

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

Inda Presanti Loekman
Executive Director a.i. of Kemitraan
Implementing Entity Coordinator

Date: 17th Jan 2020	Tel. and email: +62-21-7279 9566; Inda.Loekman@kemitraan.or.id
Project Contact Person: **Dewi Rizki**	
Tel. and Email: +62-21-7279 9566; Dewi.Rizki@kemitraan.or.id	