

FINAL REPORT

MID-TERM EVALUATION

OF

ENHANCING THE ADAPTATION
CAPABILITY OF COASTAL
COMMUNITY IN FACING THE
IMPACTS OF CLIMATE CHANGE IN
NEGERI ASILULU, URENG
AND LIMA,
LEIHITU DISTRICT,
CENTRAL MALUKU REGENCY.



ADAPTATION FUND

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September 2024



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Acronyms and Abbreviations

AF	Adaptation Fund
FAD	Fish Aggregating Device, in Bahasa known as <i>rumpon</i>
HAI	Harmony Alam Indonesia
MTR	Mid-Term Review

1. EXECUTIVE SUMMARY

This report summarizes the findings of the independent Midterm Review (MTR) conducted through field interviews between 25-28 August for the AF Project Implementation of the Enhancing the Adaptation Capability of Coastal Community in Facing the Impacts of Climate Change in Negeri Asiluly, Urang and Lima of Leihitu District, Central Maluku Regency, Province of Maluku (hereby referred to as the AF Maluku Project) that receive a USD 835,781 grant from the Adaptation Fund in August 2022.

Project Information Table

Project Title	Enhancing the Adaptation Capability of Coastal Community In Facing the Impacts of Climate Change in Negeri (Village) Asilulu, Ureng And Lima Of Leihitu District Maluku Tengah Regency Maluku Province
Project Category	Small-sized project
Type of Implementing Entity	National Implementing Entity
Implementing Entity	Kemitraan (Partnership Governance Reform)
Executing Entity/ies	Harmony Alam Indonesia Foundation
Amount of Financing Requested	USD 963,456/ IDR 11,378,430,295

Project Description

Climate change severely limits the choice of livelihoods, making life unpredictable due to the instability resulted from climate change (Rozenweig & Parry, 1994; Yohe & Tol, 2002). Coastal communities has to face challenges from climate change and the multidimensional impacts the climate change could cause will only aggravate their situation. Environmental and political-economic changes are making more and more coastal communities vulnerable (Howden et al. 2007; IPCC, 2007). Collectively speaking, thousands of households in coastal region could become impoverished due to damages occurring on infrastructure, settlement, and daily facilities, poverty, and marginalization experienced by the coastal communities throughout the history, which is expected to be more intense every year from the impact of climate change¹.

As an archipelagic province, Maluku, comprising of 1,412 islands with a total coast line of 11 thousand kilometers, and total area of 712,480 km², where 92.4% of it is seas and only 7.6% is land. The total population of Maluku Province in 2016 reached 1,715,548 people with gender ratio of 101.77 which means that for every 100 females, there are 102 males. The majority of Maluku communities (80%) live in coastal areas and for generations they are depending on the fishery and marine sector, especially capture fishery. One of the prime commodities in the capture fishery sector in Maluku is tuna. In the Long-term Development Plan (RPJP) of Maluku Province of 2005 – 2025, the Government of Maluku Province focuses the sustainability-based regional development on the functions of archipelagic ecosystem²

One of approaches for implementing development in Maluku Province is a regional approach based on Gugus Pulau concept of a total 12 Gugus Pulau (Picture 1) with growth centers acting as public service center, trading center, distribution center, and services center.

¹ Subair., Lala M. Kolopaking., Soeryo Adibiwo., & Bambang Pranowo., 2014. In Community Journal Entitled Adaptasi perubahan Iklim Komunitas Desa: Studi Kasus di Kawasan Pesisir Utara Pulau Ambon; Hal 58.

² Road Map of Climate Change Mitigation and Adaptation and Sustainable Development in Maluku Province (road map MAPI), Directorate General of Climate Change Control Ministry of Environment and Forestry and Government of Maluku Province, 2017, p. 26.

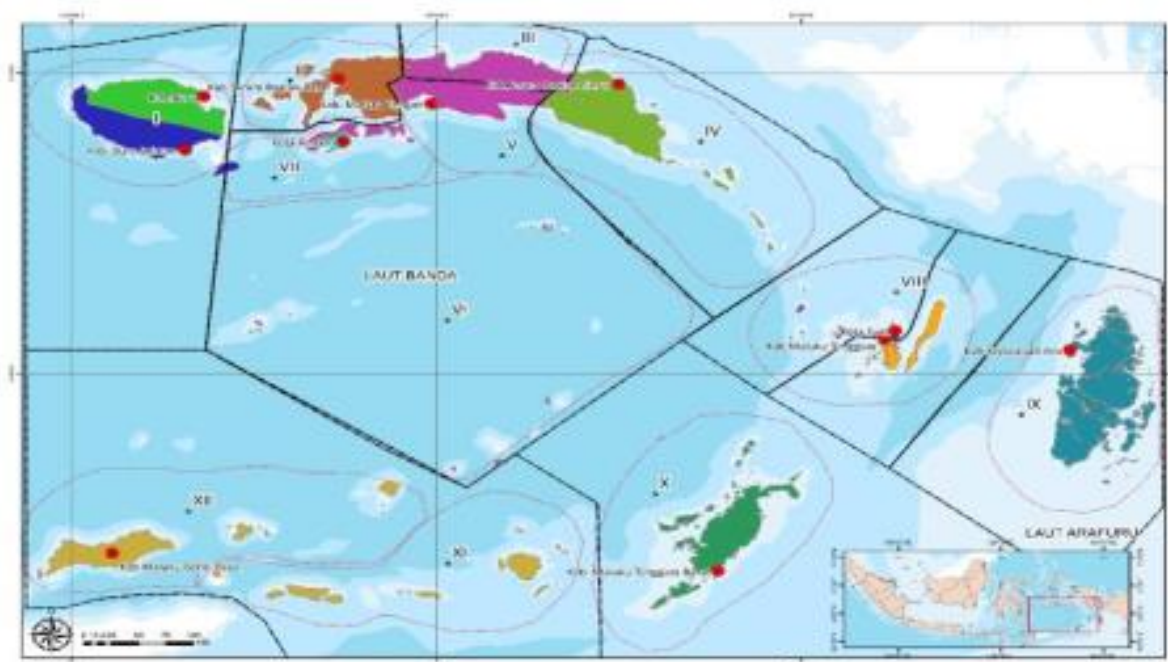


Figure 1. Maluku Province Map According to City/District and Gugus Pulau Distribution
Source: *Spatial Planning (RTRW) of Maluku Province 2013-2033*

Future projection of average temperature changes in Maluku, indicated in the downscaling statistics from IPCC Global Climate Model as carried out by Gede Junnaedhi and Joko Trilaksono in 2017, shows an increase of temperature from 0,5°C to 1,5°C. This projection is calculated using greenhouse moderate gas emission scenario, which is RCP 4.5. This scenario is also used by BMKG because it is considered moderate and suitable with emission level in Indonesia. Average yearly projection graphic in 2025 shows an increase in minimum temperature, which is a sign that Maluku has undergone climate change. This trend rises in 2026-2035 which shows that there is an even higher chance of drought in dry season and rain in rainy season. Furthermore, climate change in Maluku region can be observed from the predicted rising temperature in the period of 2036-2045. This influences the potential of high-risk natural disasters, such as flood in several regions of Maluku³.

The Regional Development Planning Agency of Maluku has identified several factors in these aspects as challenges to the adaptation efforts, among others: (1) Varied perceptions on climate change and competing priorities of the government and individuals; (2) relatively weak institutional framework of the government; (3) weak social and economic condition of the communities; (4) availability of capacity and good government in the region.

Fishery is one of the sectors contributing the most income for Maluku's economy. It is, however, one that is most impacted by climate change. According to the data from fishery statistical report of Maluku Province, most fishing catch in Maluku Province comes from aquaculture and offshore fishing yield, which result in 586,106 tons and 551,812 tons respectively, in 2013 (Maluku Province Office of Fisheries, 2016).

One of the most important commodities of Maluku in the capture fishery sector is tuna. In economic terms, the sale of tuna ranks the second (Rp2.6 billion) after scad (Rp3.8 billion). At the provincial level, tuna is the most exported fish throughout 2016 amounting to 1,115.21 tons. Meanwhile, frozen grouper ranks the third with the number of catches amounting to 8.86 tons in the last 2016. Behind such enormous potential, the results of vulnerability review workshop in 2017 indicate that Maluku Tengah, Maluku Tenggara, and Maluku

³ USAID Projection of Average Temperature Value in Maluku Province (APIK). 2018. Research Report on Maluku Province Vulnerability, Page 15.

Barat Daya Regencies as well as Tual City have an extremely high vulnerability in the capture fishery sector. This situation is understandable because the region has an extremely vast sea area and greatly depends on products in the capture fishery sector, while most fishermen in this region still fish traditionally and conventionally.

This project is aimed at assisting coastal communities in Maluku *Tengah* Regency to improve their resilience and reduce their vulnerability in the social, economic and ecological aspects from the threats of climate change impacts. Specifically, this project would assist several Negeri (villages) in Maluku Tengah, namely Asilulu, Ureng, and Lima, which are administratively located in Leihitu Sub-District. The three negeri more or less have similar characteristics in terms of livelihood and geographical as well as ecological conditions in coastal areas. The selection of those three villages as the project location is supported by the results of a research on vulnerability made by Subair (2013) stating that climate change has significant impacts on villages on the north coast of Ambon Island, specifically impacts in the social, economic and ecological context⁸. This region generally has two seasons in a year namely east and west seasons. In the rainy season from May to October, the East wind blows, while in the dry season from November to April, the west wind blows, and it generally occurs in Ambon Island. Climate and environment in the three Negeri are roughly the same, because they are still located in a single coastline. Like other negeri in Ambon Island, the three Negeri has a temperate climate with temperature ranging between 24° - 37°.

Several socio-economic impacts of climate change on fishermen according to the results of the research by Subair (2013) include the increase of sea water level reaching settlement areas, the intensity of storm and high waves posing dangers to navigation, unpredictable changes in fish harvesting seasons, unpredictable shifts of fish seasons, confusion due to the fact that west monsoon and east monsoon are no longer in accordance with the monsoon calendar used as reference. Socioeconomic impacts caused by the aforementioned condition include, among others: (1) vulnerability of settlements to damage caused by being hit by waves and strong storm wind; (2) decreasing fish catch due to the changes in fishing seasons and relocation of fishing ground.

Ecological impact in the form of damage to road infrastructure and Embankment walls frequently occurred along the coastal areas from Ambon city to Asilulu village. Asphalt paving had disappeared from the road surface and puddles of sea occurred on several spots on the road, while many parts of Embankment walls had gone and some parts were frequently inundated by sea water. Another impact affecting the communities, which was deemed as a disaster, was frequent occurrence of strong wind along with high waves, as frequently occurred in 2010. In addition, Fishermen who are affected by the increase of sea water level also realize that currently sea water has reached the backyards of some of their houses and is inundating the beach that is used to be used as the place for mooring (drying) their boats.

1.1. Project Progress Summary

Under Component 1, the activities have produced several outputs such as the project supported the development of fishing ground map, increasing the capacity of 21 fishermen to understand fishing technology such as fish finders and the use of applications/software to periodically predict potential fishing areas, formation of fishermen groups, facilitated the registration of 227 KUSUKA Cards as one of the requirements for being able to access government assistance, procurement of Fish Aggregating Device (FAD), construction of cold storage and increasing fishermen's capacity and knowledge in implementing/adopting sustainable fishing practices and strategies to deal with the impacts of climate change.

Fishing ground map, to indicate the new fishing ground distribution points based on the circulation pattern and fish migration pattern, as well as updated fishing season calendar.

Fish Aggregating Device (FAD), in Bahasa Indonesia known as *rumpon* which acts as the house for fish breeding.

Component 2, The activities of this component have produced several outputs such as capacity building for youth groups related to coral reef rehabilitation, formation of youth groups, consultation and coordination with the government to obtain permits for coral reef rehabilitation activities (activity permits have been received), coastal ecosystem protection action campaign (Beach Clean). The number of direct beneficiaries is 117 (36 Female and 81 Male) and resulted in an outreach of 300 people. In 1 year, 8 ha of damaged coral reef areas can be rehabilitated (delayed). One of the factors for the delay was the permit for the implementation of these activities, which just came out in June 2023. This delay occurred because Environmental Affairs Office (*Dinas Lingkungan Hidup/DLH* Provinsi) stated that it did not have the authority to issue permits because the activity did not require Letter of Undertaking for Environmental Management and Monitoring/SPPL and the sea area was the authority of Provincial Marine and Fisheries Affairs Office (*Dinas Kelautan dan Perikanan/DKP* Provinsi). In September 2023, making artificial reefs activities (300 artificial reefs) will be carried out. In October 2023, it is targeted that 200 artificial reefs can be placed at rehabilitation locations. In the mid-term project, it is targeted that 500 artificial reefs can be placed in the 8 hectares rehabilitation location.

Component 3. Activities from this component have produced several outputs such as: Establishment of 16 cultivator groups and 3 fish processing groups as well as strengthening the capacity of group members. During the reporting period, each group has the ability to make fishery products (such as; shredded tuna, jerky fish, smoked fish). The women group already has Business Identification Numbers (*Nomor Induk Berusaha/NIB*) and Taxpayer Identification Numbers (*Nomor Pokok Wajib Pajak/NPWP*). All members have been registered as KUSUKA card holders. The number of direct beneficiaries is 263 (139 Female and 124 Male). In the reporting period, the floating net cages (FNC) for fish cultivation program was running (9 FNCs for 3 Negeri). In October 2023, seaweed cultivation will be carried out. In the mid-term project, the expected progress outcome can be achieved.

Component 4. In this period, this component has just been implemented with an initial survey of damage to the embankment. Embankment restoration activities will be carried out in March 2024.

1.2. MTR Ratings & Achievement Summary Table

Measure	MTR Rating	Achievement Description
Project Strategy/ Project Formulation	N/A	Project design consistent with the objective and aligned with the AF program objectives and the needs of Indonesian government on climate change adaptation action.
Progress Towards Results	Objective Achievement Rating: S (Satisfactory)	Good progress on targeting direct beneficiaries (total xxx individuals out of which xxx women).
	Outcome 1.1 Achievement Rating: S (Satisfactory)	Fishing ground map has been developed and fishers have received capacity building in using web-based application called Windy to predict the season for fish catch.
	Outcome 1.2 Achievement Rating: MS (Moderately Satisfactory)	The procurement of fish aggregating device (FAD) for 3 villages had been completed, but 2 FADs has not yet been installed in 2 villages.
	Outcome 1.3 Achievement Rating: MS (Moderately Satisfactory)	The construction of cold storage building for fish processing has only been constructed in 1 village, Lima. The other two buildings are still in the progress of finding the right location and checking the legal identity of the land.
	Outcome 1.4 Achievement Rating: S (Satisfactory)	More than 450 fishers have received various capacity buildings in fishing sector issues.
	Outcome 2.1 Achievement Rating: MS (Moderately Satisfactory)	The achievement of rehabilitation of damaged coral reefs covering 12 hectares area to expand the new fishing ground has reached at least half of the targeted coverage are through the installation of artificial reefs.

	Outcome 2.2 Achievement Rating: S (Satisfactory)	Youth groups have been formed in 3 villages, received various capacity buildings related to rehabilitation of coral reefs issues and project implementation.
	Outcome 3.1 Achievement Rating: MS (Moderately Satisfactory)	The procurement of floating net cage has been fully achievement but not for the installation and application of the cage in 3 villages. During MTR, only 1 floating net cage had been installed in Lima village.
	Outcome 3.2 Achievement Rating: S (Satisfactory)	Floating rafts for seaweed cultivation was still on going, the progress during MTR was waiting for the supplier to send the seaweed seed to be planted in 3 villages.
	Outcome 3.3 Achievement Rating: MS (Moderately Satisfactory)	More than 100 women in 3 villages have skills to process fish-based products, which also participated in exhibition events not only in Maluku but also have expand their participation to promote fish-based products in Central Java (Cilacap Festival).
	Outcome 4.1 Achievement Rating: S (Satisfactory)	The progress of reparation of sea retaining wall in 3 villages during MTR, is still on going. The achievement of retaining wall repair contraction has reached more than half of the target.
Project Implementation and Adaptive Management	Achievement Rating: S (Satisfactory)	The overall aspect of adaptive management in AF Maluku Project was rated satisfactory due to the ability of the project to design, mitigate risk, mainstream gender, engagement with key stakeholders and create good way of knowledge and communication.
Relevance	Achievement Rating: S (Satisfactory)	The project is relevant to answer the needs of Maluku Government in climate change adaptation issue. The project brings action to anticipate changes in terms of environment and social effect of the climate change.
Effectiveness	Achievement Rating: S (Satisfactory)	The project has been effective to increase knowledge, generate income, and organizational capacity of the fishers.
Efficiency	Achievement Rating: S (Satisfactory)	The program's composition and structure were conducive to achieving results, deeper collaboration across components could have enhanced the full potential of the AF Maluku model. Although structured by themes/components, the division among component leader portfolios maintained essential elements, such as a network of partners and strategic positioning. However, the program struggled to ensure a more holistic approach, prompting a call for consolidation through a stronger focus on cross-sectoral engagement with less emphasis on thematic approaches.
Sustainability	Achievement Rating: ML (Moderate Likely)	The project tends to be more sustain if the support from local governments either from villages level nor regency level is in place. The communication and coordination by the project had increased awareness of the relevant stakeholders.

1.3. Recommendation Summary Table

No	Recommendation	Entity Responsible
1	Outcome 1 - Fishing ground map needs to be distributed and placed in strategic locations such as at the village offices. - Installation of FAD in 2 villages (Asilulu and Ureng) shall be conducted prior to the beginning of east season, to ensure that fish will be attracted and avoid the windy season. - Location and legal status of land to be constructed for cold chain purpose should be cleared prior to construction process to avoid misunderstanding among stakeholders.	HAI
2	Outcome 2 To ensure seaweed cultivation is successful, the assistance on seaweed planting shall be conducted at least for 1 season in 3 villages. More capacity buildings are needed such as increasing the quality of harvested seaweed, harvesting seaweed, post harvested management of seaweed, and marketing strategy.	HAI
3	Outcome 3 The quality of fish-based products shall be increased in order to ensure that the products are accepted by the market in terms of quality and price.	HAI Local government (regency level)
4	Outcome 4 The sea retaining wall work should not only be focusing on the quantity of the work but also the quality of the work conducted by the contractors to ensure the durability of the wall could last at least 10 years from the commissioning period.	HAI

2. INTRODUCTION

This report presents the findings of the Mid-Term Review (MTR) of the AF project “**Enhancing the Adaptation Capability of Coastal Community in Facing the Impacts of Climate Change in Negeri (Village) Asilulu, Ureng and Lima of Leihitu District Maluku Tengah Regency Maluku Province**”, further referred to as the AF Maluku project.

2.1. Purpose of the MTR and Objectives

Mid-Term Reviews are mandatory for all AF-financed full-sized projects and constitute an important part of the AF projects’ monitoring and evaluation plan. MTRs are primarily undertaken for adaptive management purposes, i.e., to identify challenges and outline corrective actions to ensure that a project is on track to achieve maximum results by its completion. In order to fulfil the above purpose, MTRs are conducted in order to assess the projects’ progress towards results, implementation, and adaptive management for improvement of outcomes, facilitate early identification of risks to sustainability and provide supportive recommendations.

The objective of the MTR is to provide the project partners i.e., AF, Kemitraan, and HAI, key stakeholders/ private institutions and the Governments of Indonesia with an independent assessment of progress towards achievement of the project objectives and outcomes as specified in the Project Document. As such, the MTR serves to:

- assess early signs of project success or failure with the goal of identifying the necessary changes to be made to set the Project on-track to achieve its intended results;
- strengthen the adaptive management and monitoring functions of the Project;
- enhance the likelihood of achievement of the Project and AF objectives through analyzing Project strengths and weaknesses and suggesting measures for improvement;
- enable informed decision-making;
- create the basis for replication of successful Project outcomes achieved to date
- identify and validate proposed changes to the ProDoc to ensure achievement of all Project objectives; and
- assess whether it is possible to achieve the objectives in the given timeframe, taking into consideration the pace at which the Project is proceeding.

This MTR was prepared to:

- be undertaken independent of the project management to ensure independent quality assurance;
- apply AF norms and standards for midterm reviews;
- assess achievements of outputs and outcomes, likelihood of the sustainability of outcomes, and if the Project met the minimum M&E requirements; and
- provide recommendations to increase the likelihood of the Project delivering all of its intended outputs and achieving intended outcomes.

2.2. Scope and Methodology

The scope of the MTR covers the entire HAI-supported, AF-financed, implemented AF Maluku Project and its components as well as the co-financed components of the Project. This MTR assesses months of the Project progress, achievements and implementation taking into account the status of the Project activities, outputs and the resource disbursements made up to 28 August 2024. The MTR also reports on the progress against objective, outcome, output, and impact indicators listed in the latest Project Results Framework (PRF) as to how these outcomes and outputs will be achieved within the Project duration (up to August 2025). The MTR report concludes with recommendations, as appropriate, for the key stakeholders of the Project. The MTR will be approached through the criteria of relevance, effectiveness, efficiency, sustainability, and impact, as defined, and explained in the AF “Guidance for Conducting Midterm Reviews of HAI-supported, AF financed Projects”, and the AF M&E policy. This MTR covers all activities undertaken in the framework of the AF Maluku project. The time scope of

the MTR is the implementation period of the project from August 2022 up to August 2024. The geographic scope of the evaluation is in 3 villages in Leihitu District in Central Maluku Regency, Maluku Province shown on Figure 2 below.



Figure 2. Leihitu Sub-District Map, Maluku Tengah Regency
Source: BPS of Maluku Tengah Regency, Kecamatan Leihitu Dalam Angka 2018.

2.3. MTR Approach and Data Collection Methods

The MTR used the following evaluation instruments:

- **Evaluation Matrix:** An evaluation matrix was constructed based on the evaluation scope presented in the TOR. The matrix is structured along the four GEF evaluation criteria for MTRs and includes principal evaluation questions. The matrix provided overall direction for the evaluation and was used as a basis for interviewing stakeholders and reviewing project documents. The evaluation matrix and interview guide is provided in Annex 2.
- **Documentation Review:** The evaluators conducted a review of documents (Annual Report, Project Progress Report, Project Proposals) that were made available by HAI as well as other documents found from various other sources.
- **Interviews:** The evaluator conducted a number of face-to-face consultations, FGDs and interviews in 3 villages of the project location with the key project stakeholders using semi-structured interview questions. Through the interviews, the consultant obtained information about the key informants' impressions and experiences from implementation of the project. Triangulation of results, i.e., comparing information from different sources, such as documentation and interviews, or interviews on the same subject with different stakeholders, was used to corroborate or check the reliability of evidence. The interview guide is provided as Annex 2 and the list of people interviewed as Annex 3 to this report.
- **Data analysis:** The evaluator used a combination of the above methods for gathering information in order to triangulate information and data and thereby ensure their accuracy and robustness. Visits to Project sites due to the time constraints were limited only to main location of the project in Central Maluku Regency. After the data collection phase with conducting interviews, observing selected outputs, and reviewing data from existing data sources, data analysis followed as the final phase of MTR. Data analysis involved organizing and classifying the information collected, tabulating it, summarizing it, and comparing the results with other

appropriate information to extract useful information that responds to the evaluation questions and fulfils the purposes of MTR. In this process, the evaluator took care of checking factual evidence ensuring its accuracy and translating the data into usable formats or units of analysis related to the evaluation questions. List of documents consulted is provided as Annex 4 to this report.

A detailed itinerary of the Mission is shown in Annex 5 together with a full list of people interviewed. Documents reviewed are given in Annex 4. The MTR Team for the HAI-AF project was comprised of one MTR consultant.

The Project was reviewed in the context of:

- Project strategy: This includes an analysis of the AF Maluku Project design (and Project Results Framework) as outlined in the ProDoc to identify if the strategy is effective in achieving the desired outcomes;
- Progress towards results: This is to include information provided from, amongst others, Project work plans, Project Implementation Reports (PIRs), relevant Project reports and information provided from various Project stakeholders;
- Project implementation and adaptive management: This would be an assessment of the quality of support to the Project from HAI as well as the Executing Agency of the Project, Kemitraan. Assessment parameters would include management arrangements, work planning, finance, Project level monitoring and evaluation systems, stakeholder engagement, reporting and communications; as well as cross-cutting issues; and
- Sustainability: The likely ability of an intervention to continue to deliver benefits for an extended period of time after the end-of-Project (EOP). The MTR sustainability assessment essentially sets the stage for the Terminal Evaluation during which sustainability will be rated under the four categories of sustainability, namely financial, socioeconomic, institutional framework and governance, and environmental.

2.4. Constraints and Limitations

The findings and conclusions contained in this report are based primarily on a thorough desk review of documents and direct data collection activities (through interviews and FGDs) that were made available to the evaluator.

In this way, the MTR consultant was able to conduct a detailed assessment of progress towards the expected results. However, due to the time constraint for conducting field mission, the consultant was not able to visit project location in separate islands (the small island located out of Ambon Island), the consultant was not able to visit the beneficiaries and project sites and observe changes for documentation of results on the ground. It was also not possible to interview directly and obtain opinions of a wider circle of the target beneficiaries, in particular, those from vulnerable groups.

2.5. Structure of the MTR Report

This report closely follows the structure of the MTR report outlined in the Terms of Reference that was prepared by HAI. This MTR report is designed to meet AF's "Project-level Monitoring: Guidelines for Conducting Midterm Reviews of HAI-Supported, AF-Financed Projects".

The following elements have been covered in the MTR:

1. Project Strategy
 - Project design
 - Results framework/logframe
2. Progress Towards Results
 - Progress towards outcomes analysis
 - Remaining barriers to achieving the project objective
3. Project Implementation and Adaptive Management

- Management arrangements
 - Work planning
 - Finance and co-finance
 - Project-level monitoring and evaluation systems
 - Stakeholder engagement
 - Reporting and communications
4. Sustainability
- Financial risks to sustainability
 - Socio-economic risks to sustainability
 - Institutional framework and governance risks to sustainability
 - Environmental risks to sustainability

The first part of the report describes the project background and summarizes factual information that was assembled during the initial data collection phase. The second part contains information that was collected through consultations with the key stakeholders and desk review of relevant documentation. The third part provides evidence-based conclusions connected to the findings from the second part and recommendations in the form of corrective actions for the design, implementation, management arrangements as well as for monitoring and evaluation of the project.

3. PROJECT DESCRIPTION AND BACKGROUND CONTEXT

3.1. Development Context

In the context of climate change, coastal areas around the world face multiple interrelated challenges. These include, most directly, sea-level rise and intensified coastal erosion and flooding which will have a variety of impacts including damages to the built environment and infrastructure, loss of land through submergence and saltwater intrusion and damage to coastal habitats and amenities.

A variety of ‘best practice’ approaches to coastal management have been proposed in response to these challenges. Although varied, common features of these approaches include a lesser degree of reliance on technical infrastructures and increased emphasis on cross-sectoral integration and multi-stakeholder collaboration. The new approaches have also generated the need to apply systemic concepts which are able to describe and analyze large and complex systems.

In the center of the new approach is the process of governance that consists of the legal and institutional frameworks necessary to ensure that development and management plans for coastal zones are integrated with environmental and social goals and are developed with the participation of those affected. The purpose of such approaches is to maximize the benefits provided by the coastal zone and to minimize the conflicts and harmful effects of activities on social, cultural, and environmental resources.

3.2. AF Maluku Project Context

Central Maluku consists of small islands vulnerable to even the smallest of ecological changes. As an archipelago, this area greatly depends on the ocean; both as source of living and connecting route between areas. Coastal area and the sea hold a significant function and role on the situation and condition of the surrounding areas, which greatly influences the lives and economy of the community. Weather and seasons are among the factors influencing tidal range, ocean current strength, and wind speed—which in turns influence people’s ability in earning money and their mobility. Change in fish season also impacts on fishermen’s catch and also on material losses because of the relatively high cost for going to sea due to the requirement to move continuously for catching up with time and fishing ground, while catch sometimes does not meet the target. The occurrence of El Nino and La Nina phenomenon results in the change in sea level temperature thus changing fish life pattern and fish migration⁴. Change in temperature will affect the decrease in fish upwelling zone (place for foraging), shift of fish population to colder or hotter sea and increase in sea wave. Coastal and sea climate change and diversity impact on the uncertainty of time and fishing ground for fishermen⁴.

3.3. Challenges that the project Addresses

The marine environment in Maluku region is in serious decline, primarily as a result of over-harvesting and other direct and indirect impacts of anthropogenic stresses and global climate changes. The priority environmental concerns are outline in Table 1 below.

⁴ Dirjen PPI of KLHK and Pemprov of Maluku, Working Paper Road Map Mitigasi dan Adaptasi Perubahan Iklim dan Pembangunan Berkelanjutan Provinsi Maluku, 2017, p. 41-42

Table 1. Priority environmental concerns in the Maluku region

Priority & Environmental Concerns	Key Causal Factors	Key Impacts
Unsustainable fisheries & decline & loss of living coastal & marine resources	Illegal, unreported And regulated fishing; unsustainable practices; fisheries bycatch	• Depletion of shared trans-boundary and pelagic fisheries – sharks/rays, red and gold band snappers, trepang, prawns/shrimp, and tuna • Over-exploitation of coastal fisheries resources – trepang, trochus, and coral reef fisheries • Fisheries ‘bycatch’ – shrimp/prawn trawling
Modification, degradation & loss of coastal & marine habitats	Coastal development, bottom trawling, fuel wood (mangroves), dynamite fishing, pollution (sediments)	• Decline & loss of soft bottom habitats (bottom trawling) • Decline & loss of mangroves • Decline & loss of coral reefs (sediments, dynamite fishing) • Decline & loss of seagrasses (sediments, dieback)
Marine & land-based Pollution (i.e., marine debris, sediments, oil spills)	Coastal development (Nutrients, sediments), mining (sediments, toxicants), land degradation (sediments), oil spills, marine debris	• Sediment runoff – land degradation • Toxicants (coastal mining activities) • Eutrophication • Marine debris
Decline & loss of biodiversity & Key marine species	Illegal and unsustainable harvesting, fisheries bycatch (tuna longlines), habitat loss, and climate change	• Marine turtles (illegal and unsustainable harvest, fisheries bycatch, marine debris, tuna longlines) • Cetaceans (fisheries bycatch, shipping, seismic activities) • Sharks/rays (IUU fishing, unsustainable harvest, fisheries bycatch) • Sea snakes (fisheries bycatch) • Seabirds/shorebirds – ATS (oil and gas industry impacts, fisheries bycatch, illegal and unsustainable harvest)
Impacts of climate change	Fossil fuel-based global energy consumption, land use, land use change, and forestry	• Ocean warming – dynamics of the Indo-Pacific Warm Pool, ocean thermostat • Increased sea temperatures - northern seas warming, impacts on ocean processes, marine biodiversity (particularly marine reptiles, corals) • Increased extreme climatic events (cyclonic activities, rainfall, drought) – increased cyclonic frequency & intensity • Sea level rise – coastal flooding, saltwater intrusion, loss of coastal habitat & biodiversity

Source: ATSEA, 2012. *Transboundary Diagnostic Analysis for the Arafura and Timor Seas Region*

These transboundary priority environmental concerns are influenced by several key drivers, including national macro-economic conditions, including economic growth, consumption patterns, and labour markets; domestic politics and policies, and regulation, including taxation, industry protection, environmental policy, industry assistance and development; and region-specific trends, including land supply, land rights claims, views on the environment, regional development policy, demographic, and labour market changes⁵.

⁵ Stacey, Ne, Nurhakim, et. al, Socio-economic Profile of the Arafura and Timor Seas. Report prepared for the ATSEA Programme, 2011

3.4. Project Description and Strategy

The AF Maluku Project is AF-financed, Kemitraan and HAI supported program, is designed to enhance collaboration and coordination in the Maluku region. The AF Maluku Project specifically focuses on supporting the implementation of the strategic action plan with the objective to support climate change adaptation action and its implementing stages in Maluku Province as established in Climate Change Mitigation and Adaptation Road Map and Sustainable Development of Maluku Province. In particular, this project aims to improve the level of adaptability and resilience, as well as to eliminate vulnerability in the social, economic and ecological standpoint from the threat of climate change experienced by coastal communities in three Negeri/Villages, utilizing sustainability principles in managing and leveraging coastal ecosystem region, which are:

1. Increasing the fisherman knowledge and ability to deal with changes in circulation patterns and fish migration patterns
2. Improving the coastal ecosystems for the resilience of coastal communities and alternative sources of fishing for local fishing groups.
3. Strengthening the economic resilience of the community through the development of alternative economies in coastal areas that are resistant to climate by utilizing the economic potential of the coast.
4. Strengthening community resilience in the face of disasters through the construction of supporting facilities to minimize the impact of tides and waves.

The project objective is to improve the level of adaptability and resilience, as well as to eliminate vulnerability in the social, economic and ecological standpoint from the threat of climate change experienced by coastal communities. In order to achieve the above objective, the project's intervention is organized in four components with total of seven outcomes.

- Component 1 : Strengthening the adaptation of traditional fishermen in facing changes fish migration and circulation patterns due to climate change.
- Component 2 : Coastal ecosystems repair for the resilience of communities and alternate location for source fishing
- Component 3 : Alternative economic development in coastal areas that are climate resilient by utilizing technology in fisheries and marine areas.
- Component 4 : Development of supporting facilities to anticipate the impacts of coastal flooding and tidal waves

3.5. Expected Project Results

Expected results of the AF Maluku Project include:

- Increasing the yield and quality of fish catches of fishermen as well as helping improving the traditional fish catching rules (Sasi Laut)
- Enhancement of the capacity and knowledge of fishermen' groups by adopting the climate change adaptation strategies.
- Restoration of the function of coral reef ecosystems and expanding fishing ground zones for fishermen in nearshore waters
- Increased awareness and active role of coastal communities to rehabilitate, maintain and protect coral reefs
- Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level
- Increased ecosystem resilience in response to climate change and variability induced stress
- Reducing dependence on livelihoods as catch fishermen
- Increasing the role of women in the family economy

Environmental Benefits: the project is expected to generate environmental benefits including:

- Maps of the distribution of new fishing grounds based on circulation and fish migration and renewable patterns, which utilize and update the fish calendar that facilitate utilization and affordability, will ensure sustainable management of marine resources (especially fishing), and avoid there is over fishing on the reef areas.
- The coral reef rehabilitation project will contribute to improving the ecosystem of coral reef in Leihitu district with 10 Ha or + 18% of the damaged areas targeted.
- The rehabilitation sea retaining wall/ *talud* will reduces the impact intrusion into land, that resulting in street erosion and public facilities.

Socio-Economic Benefits: The environmental benefits will be underpinned by socio-economic benefits, such as improved livelihoods and food security, accruing from improved delivery of ecosystems services from integrated natural resources management and sustainable fisheries. The project aims at removing disparities that limit adaptive capacity and exposure of women and vulnerable groups to greater risk, making them more vulnerable to the impacts of climate change. Prevailing social conditions and gendered labour divisions in the fishing sector tend to provide women with less access to income, assets, resources, technology, training, and decision-making power than men. The project goal in this area is achievement of equitable and effective participation by women and vulnerable groups in resilience planning and implementation, in order to achieve more equitable share of opportunities and benefits resulting from these processes, including:

- the fishermen will have season calendar guidelines and a new fishing ground area, thereby reducing dependence on collecting traders.
- the ability of community groups to be able to access government, capital and market programs.
- strengthening the capacity of fishers' groups through training and institutional strengthening to be more ready to face the challenges of climate change, compared to individual fishermen.

Knowledge Management: The project is expected to generate a significant mass of knowledge and technical capacity for replication and scaling up of experiences and best practices. When the project ends, these resources will continue to be available to sub-national and local partners, as well as to a wider national audience, including:

- Renew the fishermen's knowledge of the traditional season calendar that has been used and renew the traditional fishing rules (*Sasi Laut*) which has been a reference for the fishing community at the project site.
- improve capacity and solidity of the communities in understanding and implementing climate change adaptation strategies, help to access fisheries technology, group consultation, access to capital, and to build a network with stakeholders - including government - for the institution sustainability post-project.
- Strengthen the resilience and independence of fishing groups in solving problems faced as a result of climate change. Strengthen solidity and reduce dependency on collecting traders.

3.6. Project Implementation Arrangements

This project was designed for implementation under the NGO implementation modality. The Executing Entity (EE) for this project is the HAI Foundation which has a local partner in Ambon (Maluku Tifa Damai Institute) and formed a Project Management Unit (PMU) structure. The PMU is responsible for implementing the project and ensures the outcomes to be achieved are in accordance with project planning. PMU is led by the Program Director responsible to the Kemitraan as National Implementing Entity (NIE). In delivering work progress, the Program Director will be assisted by an Outcome Leader Component (4 person- Outcome Leader Component) led by Project Coordinator.

The Project Coordinator is responsible for ensuring that the project activities in the targeted villages are running. Outcome Leaders, Coord. Officers, Field Officers are responsible for the implementation of activities in each targeted area, and will report to the Project Coordinator and will be assisted by the Financial Assistant who will handle the administrative and financial issues at the local level, while the

Finance Manager is responsible for the financial issues in the overall project activity. The pattern of coordination, reporting, money will be conducted regularly with the National Implementing Entity.

The Steering Committee (SC) will oversee the entire program implementation to ensure that the facilities and mechanisms have run the program effectively so as to achieve the desired results, while also representing the voices of stakeholders who are not directly responsible for the project.

3.7. Project Time Frame and Milestones

The project proposal was submitted to the Adaptation Fund in November 2013. The specific timeline of the project is summarized in Table 3 below:

Table 3. Key Project Dates

Milestone	Timeline
Submission of project proposal to AF	November 2013
Project Document Signature	
Project Cooperation Agreement Signature (HAI and Kemitraan)	
Memorandum of Agreement (HAI and Kemitraan)	
Project Inception Report	
Project Kick Off Meeting	
Project Inception Workshop	
Date of Mid-term Review	26 August 2024
Expected Date of Terminal Evaluation	
Planned Closing Date	August 2025

4. FINDINGS

4.1. Project Strategy

The MTR consultant conducted an analysis of the design of the project, as outlined in the Project Document, and assessed whether the project strategy is proving to be effective in reaching the desired results. In doing so, the evaluators judged the extent to which the project addresses country priorities and is country driven. Furthermore, the evaluators assessed the extent to which the project objectives are consistent with the priorities and objectives of the AF.

Project Design and Relevance

Relevance is the extent to which JP's objectives are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies.

Finding
Rating: HS
The AF Maluku project demonstrates high relevance to both national and sub-national needs in Indonesia, effectively addressing the requirements of stakeholders and beneficiaries involved in the initiative. The AF Maluku project's scope has become more relevant to assist the government of Indonesia in assisting local community in three villages in Central Maluku Regency to improve the level of adaptability and resilience, as well as to eliminate vulnerability in the social, economic and ecological standpoint from the threat of climate change experienced by coastal communities.

This project will follow the technical standards based on the direction and policy in the National Action Plan for Climate Change which has been designated by the Ministry of National Development Planning (Bappenas), the climate change and sustainable development adaptation roadmap owned by the Government of Maluku Province, and the local and national policies, both existing and future policies.

Relevance to the Indonesia's national standards and laws

The implementation of this project involved individuals who are knowledgeable and have expertise in their fields (Experts) to ensure the success of the activities being proposed. These experts will attend all activities from the beginning until the completion of the project which will be run by the contractor and the community. The relevance of each project component to the existing national standard and laws is described in the following table.

Table 4. Relevance of the Project to the Indonesian National Standards and Laws

Project Component	Indonesian National Standards and Laws
Component 1	- As per Constitution of Republic of Indonesia No. 32/2009, the utilization of natural resources must be in balance with environmental function. - UU No. 31/2004 about Fisheries. UU No. 45/2009 about Fisheries. Fisheries Act, article 7 and 9 dictates the Ministry of Marine Affairs and Fisheries to regulate the following: - type, amount, fishing tool size (Article 7, item f); type, amount, size, and fishing equipment placement (Article 7, item g); - area, lane, and time or fishing season (Article 7, item h); - terms or standard operation procedures for fishing (Article 7, item i); - weight or minimum weight of certain type of catchable fish (Article 7, item q); - condition of fishing equipment and/or fishing aid that is able to disrupt and damage the continuity of fish cultivation (Article 9, paragraph (2)).

	• Ministerial Decree KP No. 06/MEN/2010 about Fishing Equipment in Indonesian Fishing Waters. • Law of Ministry of Marine Affairs and Fisheries No. 47/Permen-Kp/2016 Regarding the Utilization of Water Conservation Area • Law of Ministry of Marine Affairs and Fisheries No 26/PERMEN-KP/2014 of FADs
Component 2	• The Law of Ministry of Marine Affairs and Fisheries No. 6/Permen-KP/2017 regarding the Organization and Working Procedure of Marine Affairs and Fisheries • As per Constitution of Republic of Indonesia No. 32/2009, the utilization of natural resources must be in balance with environmental function. • Ministerial Decree No. KEP.38/MEN/2004 Regarding General Guide on Coral Reef Management. • Coral Reef Rehabilitation Guidelines: the Directorate Conservation and Marine Ecosystem. Directorate General of Nautical Management. Ministry of Marine Affairs and Fishery, 2015. • UU No. 31/ 2004 on Fisheries. UU No. 45/ 2009 on Fisheries, article 7, item N, P, and R.
Component 3	• The Law of Ministry of Marine Affairs and Fisheries No. 6/Permen-KP/2017 regarding Organization and Working Procedure of Marine Affairs and Fisheries • UU No. 45/2009 on Fisheries, point 22 article 46 Paragraph (1) • Article 2-3 UU No. 45 year 2009 states that it is forbidden to perform fish • cultivation, be it genetically engineered or not, which is potentially harmful on fish resources, fishing grounds and/or human health. Also, the government strictly forbids the use of drugs in fish cultivation which may endanger fish resources, environment and health. • The Law of Ministry of Marine Affairs and Fishery No. PER.01/MEN/2007 on Quality Control and Safety of Fishing Yields. • Decree of Ministry of Marine Affairs and Fisheries No. KEP. 07/MEN/2004 on Fish Seeds Acquisition and Distribution. • Decree of Ministry of Marine Affairs and Fisheries No. KEP.02/MEN/2007 on Suitable Fish Breeding Method. • Decree of Ministry of Agriculture No. 26/1999 on National Seeds Development. • Indonesian National Standard – SNI 7672-2011 (seaweed seed colony) Amended in November 2013 55 – SNI 7673.1-2011 (LK-off-bottom monoline method) – SNI 7673.3-2011 (seaweed seed production) – SNI 7673.2-2011-produksi LK-met.long line
Component 4	This project follows national standard which is stipulated in the Circular Letter of the Ministry of Public Works No. 07/SE/M/2010 Regarding Lifeguard Construction Guidelines

Relevance to the beneficiaries' needs

Stakeholders and beneficiaries engaged in this MTR process have emphasized the relevance of the JP support to their needs, particularly in relation to bond issuance, capacity building, business incubations and development.

Analysis of Project Results Framework/Logframe

The MTR consultant performed critical analysis of the project results framework in order to establish to what extent is the definition of the project's objective, outcomes, and outputs clear, practicable and feasible within the project time frame and whether the indicators and their targets enable measurement of progress to achievement of the planned results. The analysis also includes assessment whether the indicators in the SRF were formulated in line with the SMART criteria⁶.

Table 5 below summarizes the main observations related to the project results framework

Level	Indicator no and description	MTR Assessment	Suggested modified indicators or EOP targets
Outcome 1.1.: Increasing the yield and quality of fish catches of fishermen as well as helping improving the traditional fish catching rules (Sasi Laut)	• Fishermen operational cost while fishing decreased by 20% • Increase catches of tuna fishing groups up to 30%	Development of FAD requires the institutional management of fishers group	The EOP for increasing catch up to 30% was too ambitious regardless of the ability to manage the group.
Outcome 1.2.: Enhancement of the capacity and knowledge of fishermen' groups by adopting the climate change adaptation strategies.	• Fishermen use the updated season calendar and New Fishing Ground Area • Fisherman Group in 3 Negeri Mou with PT Harta Samudera related to the sustainable sale of tuna	Fishing ground map has been delivered although has not been disseminated to the fishers in 3 villages yet.	The target for having MoU with private sector was too ambitious and need to be revised concerning the remain project duration which is less than a year before August 2025.
Outcome 2.1.: Restoration of the function of coral reef ecosystems and expanding fishing ground zones for fishermen in nearshore waters	12 ha of coral reefs are recovered	The restoration of coral reefs was actually conducted based on damaged spots area. Until MTR was conducted 440 artificial reefs were installed covering half of the targeted area for rehabilitation.	The wording for indicator shall be modified to avoid bias on the meaning 12 hectares.
Outcome 2.2.: Increased awareness and active role of coastal communities to rehabilitate, maintain and protect coral reefs	300 people in Community (minimum) coastal have the awareness and active role of to rehabilitate, maintain and protect coral reefs	Youth have been actively involved in coral restoration activities.	N/A

⁶ SMART stands for Specific, Measurable, Attributable, Relevant, Time-bound.

Outcome 3.1.: Reducing dependence on livelihoods as catch fishermen	Increase in community income derived from aquaculture and seaweed up to 30%	Seaweed cultivation has been attractive to women and their participation is high. During MTR, planting of seaweed has not been conducted due to undelivered seaweed seed.	N/A
Outcome 3.2.: Increasing the role of women in the family economy	Minimum 250 women (house mothers) can reduce Dependence on husband's income	Women are actively involved in business group, fish-based products have been introduced through exhibition events.	N/A
Outcome 4.1.: Disaster risk reduction such as damage to seaside village roads and saving of community houses on the coast, caused by tidal waves	At least ± 800 lives/person in 3 negeri will be averted from the potential threats of tidal waves	During MTR, the sea retaining wall process was still on going. The work was predicted to be accomplished by October 2024.	N/A

The assessment of the strategic result frameworks (SRF) shows that the SRF contains few inconsistencies that hamper measurement of progress in the project implementation. In particular, several indicators are not specific to measure achievement of the related project outcomes. In one case (Outcome 2.1), the outcome was found too ambitious as it calls for 12 hectares of restoration of coral reefs based on better understanding of climate change impacts while it is not clear

Apart from the inconsistencies discussed above, the other outcomes and their indicators are clearly defined to describe the desired changes and their respective targets are measurable and achievable by the end of the project. However, the MTR considers the main insufficiency of the SRF the fact that the latter does not define mid-term targets as benchmarks for assessment of progress on the road towards achievement of the planned results.

Theory of Change

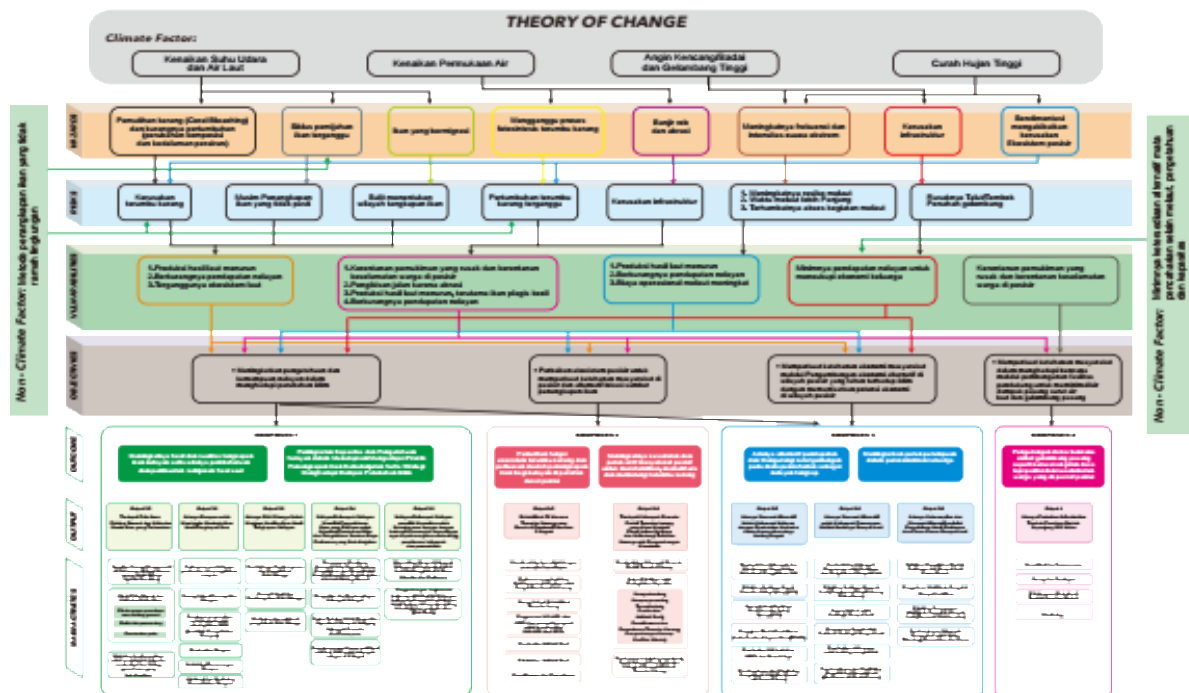


Figure 3. AF Maluku Project's Theory of Change

4.2. Progress Towards Results

Progress Towards Outcome Analysis

The information presented in this section has been sourced from the annual Project Report, Project Progress Report (PPR), Project Proposal for the FYs 2023 Reports (PAR), the GEF Project Implementation Reviews (PIR) for the FYs 2021 and 2021, technical reports produced by the project; information collected by the MTR Consultant through visits of selected project field sites in Maluku Province, as well as information collected from interviews with the key project stakeholders.

The implementation progress and remaining barriers are presented for each Outcome in separate Tables 5 -12 and the overall progress towards the Project Objective is summarized in Table 13.

The Outcome ratings in Tables 5 - 12 are based on the premise that the project has to be completed within the officially approved implementation period. Hence the rating scores are given on the expectation whether the outcomes will or will not achieve their respective end-of-project (EOP) targets by the end of the approved project period. The AF guidelines for MTRs require the evaluators to provide only one overall rating for each outcome and the overall Project Objective rating. Rating for the output indicators is given by the colour shading of the last column in Tables 5 – 10.

Table 6. Progress Towards Results Matrix for Outcome 1.1 and Outcome 1.2 (Achievement of Outcome-Level Indicators against End-of-Project Targets)

Project strategy	Outcome 1.1.: Increased the yield and quality of fish catches of fishermen as well as helping improving the traditional fish catching rules (<i>Sasi Laut</i>)					
Indicators	Baseline Level	End-Of-Project Target	Mid-Term Level & Assessment	Achievement Rating	Justification for Rating	Remaining Barriers
Fishers operational cost while fishing decreased by 20%	0	Fishing ground map is disseminated and utilized by fishers from 3 villages	Fishing ground map has been developed and awaiting to be printed and displayed in the strategic places of each village such as in the village office	S	Knowledge of fishers increased in terms of using technology for fishing purposes, project has been implemented in an effective way through purposive capacity building activities targeting fishers in 3 villages.	Fishing ground map shall be disseminated in strategic open spaces to inform more fishers the new area of fishing ground.
Increase catches of tuna fishing groups up to 30 %	0	3 FADs have been installed in 3 villages	2 out of 3 FADs has been constructed and operated in 2 villages, and managed by FAD groups in Negeri Lima and Asilulu	MS	One of the successful FAD managements was managed by Negeri Lima fishers' group which showed significant improvement in terms of group's income and activity management, while one FAD in Asilulu was swept away due to high sea wave and has been lost for 5 months. During the MTR it has been found and has operated (unfortunately not in proper point of FAD placement and	Overall barrier that may impact in various aspect of the project implementation timeline: beneficiaries' willingness in <i>Negeri Ureng</i> to manage the group and utilize FAD as one of their alternative sources of income
	Outcome 1.2.: Increased Capacity and Knowledge of Fishermen in Implementing/Adopting Sustainable Fishing Practices and Strategies to Deal with Climate Change Impacts					

Fishermen use the updated season calendar and New Fishing Ground Area	0	Fishing ground maps are placed in strategic areas	Fishing ground map has not been placed in strategic area yet.	MS	Although fishers have been equipped with knowledge and web-based technology, and fishing ground map has been developed, the map shall be placed in strategic areas to increase the	N/A
Fisherman Group in 3 villages Mou with PT Harta Samudera related to the sustainable sale of tuna	0	Establish cooperation as supplier of fish with private company	Although in Negeri Lima FAD has been installed and well-managed by the fishers' group but MoU with private company has not been established yet	MS	1 out of 3 FADs was well-managed and generate income for the fisher group, despite the quantity of tuna catch are still lower than the needs of the company.	2 FADs shall be installed in other 2 villages to reach the goal of being tuna supplier in order to increase fishers' income.

Output 1.1.: There is a Renewable Fishing Ground Area Map and Fish Season Calendar

Tuna is one of the fish commonly caught by the traditional fishermen in the project location. Tuna belongs to the group of large pelagic fish, in Thunin tribe (Genus: *Thunnus*). Tuna price in the project location depends on the freshness of the fish. Fishermen sells tuna to tuna processing company in the form of fish loin⁷ with weight ranging from 10-15 kg.

But during Monsoon Season, extreme weather such as high intensity of storms often resulted in changing the fish migration pattern¹⁴, it becomes far more difficult to predict and tends to get much farther from the land. By utilizing fishing ground area map that combines both fisherman traditional insight and modern knowledge technology, it is expected that this map can serve as a reference for fishermen in three villages/ *negeri* to understand the pattern of fish circulation and migration and help update the fish catching season calendar. FAD/ *rumpon* created and placed in the fishing ground acquired from the mapping will serve as fish temporary stopover points during migration and the spawning and feeding ground.

During MTR, one fishing ground map has been developed but has not been placed in strategic location yet. Prior to placing the map, a socialization of fishing ground map shall be conducted to remind fishers of the potential area of fishing ground.

Output 1.2.: FAD Procurement

It is essential to understand the significant impact that the creation of FAD/ *rumpon* can have on fishing activities, particularly in attracting and aggregating fish in a specific area. FAD not only serves as an attractor and aggregating spot for fish but also provides a conducive environment for fish to protect themselves, feed, breed, and gather food sources.

By leveraging FAD as an artificial fishing ground and promoting its use among fishermen, there is an opportunity to enhance fishing efficiency, reduce operational costs, and support sustainable fishing practices that benefit both the environment and the livelihoods of fishermen in the project location.

FAD has been procured during MTR, for Asilulu, FAD once has been installed and utilized but due to major force (extreme weather), the installed FAD was lost. It took few months to get the FAD back to Asilulu. But for Ureng, although FAD has been procured but not yet installed due to the absence of fishers group to managed the operational of FAD.

Output 1.3.: Construction of Cold Storage/TP3I (Fish Landing, Sales and Storage)

When it comes to maintaining the quality and freshness of fish, especially in areas where accessing deep waters has become difficult due to climate change, having cold storage or fish refrigeration facilities is crucial. This allows fishermen to preserve their catch longer and prevent depreciation in the selling price of their fish as they are unable to keep them fresh for extended periods.

By utilizing cold storage facilities, fishermen can maintain the quality of their fish and ultimately secure better prices in the market. The grading system for fish, such as tuna, helps determine the selling price based on the quality of the meat. For instance, Grade A tuna meat, which is fresh and of high quality, commands a higher price compared to Grade B or Grade C. However, without proper storage facilities, fishermen are often compelled to sell their catch at lower prices due to the risk of fish losing freshness.

To address these challenges and enhance the economic value of local fishing groups, initiatives like providing cold storage facilities can greatly benefit fishermen. By establishing cold storage units with

⁷ loin is the process of cleaning the fish by cutting the heads and removing the gills and innards.

appropriate specifications and organizing a management system amongst fishing groups, the freshness and quality of fish can be maintained, leading to higher profits for fishermen when selling their catch in the market.

Therefore, the role of adequate cold storage facilities is crucial in ensuring that fish quality is preserved, allowing fishermen to secure better prices for their catch despite challenges in accessing fishing areas and market fluctuations.

Given the situation where only one Fish Aggregating Device (FAD) is operational and two other planned cold storage facilities have not been built due to the lack of a designated location for construction, it is crucial to address this challenge during the Mid-Term Review (MTR) to ensure the project's success and impact.

Output 1.4.: About 450 fishers (150 fishers in each Negeri) have new knowledge that is more relevant to climate change

The number of direct beneficiaries is 363 (155 Female and 208 Male) they are joined in 3 KUB groups, 3 POKLAHSAR⁸ groups and 13 POKDAKAN⁹ groups.

Summary Assessment of Outcome 1.1 and 1.2:

All outputs under Outcome 1.1. and 1.2 have been practically delivered by the MTR stage. Some progress has been observed under Output 1.3 with the respective FAD and cold storage already established in one village while the installation process for FAD in other 2 villages was still in progress during the MTR. However, as of MTR, only in Lima village, FAD and cold-storage has been fully functional. Under Output 1.4, the target of fishers whose capacity have been increased has been fully accomplished. The capacity building activities were conducted and joined not only by male fishers but also female fishers.

Based on the above, **the progress under Outcome 1.1 and Outcome 1.2 are rated Moderately Satisfactory (MS).**

⁸ Poklahsar stands for *kelompok pengelola dan pemasar*/ managing and marketing group.

⁹ Pokdahkan stands for *kelompok pembudidaya ikan*/ fish cultivation group.

Table 7. Progress Towards Results Matrix for Outcome 2.1 and 2.2 (Achievement of Outcome-Level Indicators against End-of-Project Targets)

Project strategy	Outcome 2.1.: Restoration of the function of coral reef ecosystems and expanding fishing ground zones for fishermen in nearshore waters					
Indicators	Baseline Level	End-Of-Project Target	Mid-Term Level & Assessment	Achievement Rating	Justification for Rating	Remaining Barriers
12 ha of coral reefs are recovered	0	12 ha of coral reefs are recovered	480 unit of artificial reefs were created and placed in rehabilitation sites.	MS	Although artificial reefs have been installed in certain coordinate beneath the sea, but the coverage of coral rehabilitated has not reached the EOP target yet.	
	Outcome 2.2.: Increased awareness and active role of coastal communities to rehabilitate, maintain and protect coral reefs					
Increased awareness and active role of coastal communities to rehabilitate, maintain and protect coral reefs	0		3 coral reefs youth community group are formed (30 person each, 90 persons total)	S	The coral reef groups have also placed artificial reef as a stimulator for fishing ground. They also have received capacity building related to environmental activities.	

Output 2.1 Rehabilitation of ± 12 hectares of coral reefs in Asilulu and Lima villages in order to expand new fishing grounds near the shore

The rehabilitation of coral reefs in Asilulu and Lima villages has been conducted through the placement of artificial reefs, and it will take some times for the artificial reefs to become the fishing ground points that will attract fish to breed in those areas. During the MTR, more than half of the targeted artificial reefs have been placed in certain locations.

Output 2.2. Increased capacity and knowledge of youth groups in transplanting, maintaining, monitoring and caring for coral reefs

Targets defined under Component 2 are not all met or not fully met. The Project has been providing technical support to the youth beneficiaries including introducing artificial reef as fish house to rehabilitate damaged coral. The use of artificial reef was based on the consultation with DLH Maluku. Despite successes, the targeted area of coral rehabilitation until MTR have not reached the target yet and still largely lagging behind. The local governments including Negeri and government agencies in provincial level are fully supportive in terms of rehabilitating coral.

Mid-Term Evaluation

Enhancing the Adaptation Capability of Coastal Community in Facing the Impacts of Climate Change in Negeri Asilulu, Ureng and Lima, Leihitu District, Central Maluku Regency, Maluku Province

Summary Assessment of Outcome 2.1. and 2.2.:

By reviewing the result achieved until MTR period, where damaged coral has been rehabilitated in certain sites despite the rehabilitation requires time to cover the damaged areas, is creating basis for coral recovery for increasing the effectiveness of rehabilitation.

The project also conducted a series of training activities related to institutional and stakeholder capacity building in the three beneficiary villages related to coral rehabilitation and potential of underwater tourism.

Based on the above, **the progress under Outcome 2.1. and 2.2. is rated Moderately Satisfactory (MS).**

Table 8. Progress Towards Results Matrix for Outcome 3 (Achievement of Outcome-Level Indicators against End-of-Project Targets)

Project strategy	Outcome 3.1.: Reducing Dependence on Livelihood as Capture Fishermen					
Indicators	Baseline Level	End-Of-Project Target	Mid-Term Level & Assessment	Achievement Rating	Justification for Rating	Remaining Barriers
Increase in community income derived from aquaculture and seaweed up to 30%	0	Floating net cages and seaweed has been installed and conducted in 3 villages.	Floating net cage only successfully managed in Asilulu, but in other 2 villages, still facing barriers. Cultivation of seaweed has not been conducted during MTR yet, due to delay of seaweed seed supply.	MS	The management of floating net cage requires experience and division of labor from each member of fishers' groups. Not every group member available to share their time to manage the cage, except for Asilulu	N/A
Increasing the Role of Women in the Family Economy						
Minimum 250 women (house mothers) can reduce dependence on husband's income	0	250 women can reduce dependence on husband's income	Women are involved in seaweed cultivation and business groups to produced fish-based food products.	S	The target of women's involvement in business and sea weed cultivation, in terms of quantity, has been fully met. In terms of quality, cooperation with recency level government agencies are still needed to ensure the quality of fish-based product increased.	Quality of food products by women's business group should be supervised to ensure that the food is safe and accepted by the market.

Output 3.1: Floating Net Cage Cultivation in 3 Negeri (3 Cages in Each Negeri) Managed by Groups

- Floating net cages (KJA) was chosen as alternative sources of income for fishers especially during wet/season and transitional season to ensure that fishers are still available to generate income.
- Despite the success of introducing KJA as alternative way of generating income, managing KJA has its own obstacles in particular related to the management of the cages (divisions of roles of each member).
- Challenges to manage KJA mostly due to inexperience of fishers in cultivating caged fish.

Output 3.2: Nine Floating Rafts for Seaweed Cultivation (3 rafts for each Negeri) Managed by Groups

- Women are encouraged to be involved in cultivating seaweed to increase their participation rate and empower their economic, although the whole seaweed cultivation participants are inexperienced.

Output 3.3: 100 women (mothers) in 3 negeri have the skills to process fish farming or fishery product management, and seaweed cultivation

Since the beginning of the project, women are considered to be actively involved in project activities. The participation of women in project activities illustrates that women are given space to increase their knowledge and open up opportunities to earn income. The project provides guidance on building a business and the government at the regency level also provides support in the form of technical assistance to take care of business permits such as NIB, NPWP, PIRT legality and halal certification for food products produced.

This opportunity is not only open to women in the food business sector, but also to those interested in seaweed cultivation. Introduction to the concept of cultivation is provided through a series of training and direct practice. However, when the MTR was implemented, seaweed planting had not been carried out due to delays in the delivery of seaweed seeds.

Based on the above, **the progress under Outcome 3 is rated Moderately Satisfactory (MS).**

Table 9. Progress Towards Results Matrix for Outcome 3 (Achievement of Outcome-Level Indicators against End-of-Project Targets)

Project strategy	Outcome 4: Reduction of disaster risks such as damage to roads on the beach and safety of residents living on the coast due to tidal waves					
Indicators	Baseline Level	End-Of-Project Target	Mid-Term Level & Assessment	Achievement Rating	Justification for Rating	Remaining Barriers
At least ± 800 lives/person in 3 negeri will be averted from the potential threats of tidal waves	0	1600 meter of sea retaining wall has been completed in three villages.	The retaining wall works was still on-going process during the MTR. The target for completion was in October 2024.	S	The construction of retaining wall has reached more than 800 meters in 3 villages, with the target duration of 90 calendar days for completion.	For future purpose, quality of the project should also be considered as part of the construction work.

Output 4.: Repair of Damage to Wave Retaining Walls (*Talud*) in Negeri Lima, Ureng, and Asilulu

During the MTR, the wave retaining wall work is still under progress. In terms of quantity of the construction, the work has reached 800 meters in 3 villages with 90 days of calendar days for completion. But, unfortunately in terms of quality, the construction was not carefully supervised due to unavailability of competent field supervisor without checking the quality of concrete to be produced. The involvement of *Dinas PUPR* Ambon in the retaining wall construction was a good approach to gain local government's interest and participation as the additional construction supervisor. The *Dinas PUPR* assisted HAI in retaining wall construction through supervising the achievement of quantity of the construction. The construction of the retaining wall was conducted through hiring local contractor, and community was involved in the construction work as daily workers. The consideration of hiring local community was to engage their sense of belonging in terms of constructing the wall which located in their village area.

Table 10: Progress Towards Results Matrix towards Project Objective (Achievement of Objective-Level Indicators against End-of-Project Targets)

Project strategy	Objective.: Increase the knowledge and ability of fishermen to deal with changes in circulation patterns and fish migration patterns					
Indicators	Baseline Level	End-Of-Project Target	Mid-Term Level & Assessment	Achievement Rating	Justification for Rating	Remaining Barriers
☐ One fishing ground map and fishing season calendar ☐ 1.800 Fisherman of 3 Negeri improve their understanding on the collaboration between traditional and modern knowledge ☐ There will be at least 1 Cold Storage of 1000 kg capacity in 3 Negeri	0	Fishing ground map is disseminated and utilized by fishers from 3 villages	Fishing ground map has been developed and awaiting to be printed and displayed in the strategic places of each village such as in the village office	S	Knowledge of fishers increased in terms of using technology for fishing purposes, project has been implemented in an effective way through purposive capacity building activities targeting fishers in 3 villages.	Fishing ground map shall be disseminated in strategic open spaces to inform more fishers the new area of fishing ground.
☐ Fishermen operational cost while fishing decreased by 15%-30% ☐ <i>Rumpon</i> Procurement / Fish Aggregating Device (FAD) in each Negeri ☐ Fishing catch increased by 20%	0	3 FADs have been installed in 3 villages	2 out of 3 FADs has been constructed and operated in 2 villages, and managed by FAD groups in Negeri Lima and Asilulu	MS	One of the successful FAD managements was managed by Negeri Lima fishers' group which showed significant improvement in terms of group's income and activity management, while one FAD in Asilulu was swept away due to high sea wave and has been lost for 5 months. During the MTR it has been found and has operated (unfortunately not	Overall barrier that may impact in various aspect of the project implementation timeline: Beneficiaries' willingness in Negeri Ureng to manage the group and utilize FAD as one of their alternative sources of income

Mid-Term Evaluation

Enhancing the Adaptation Capability of Coastal Community in Facing the Impacts of Climate Change in Negeri Asilulu, Ureng and Lima, Leihitu District, Central Maluku Regency, Maluku Province

					in proper point of FAD placement and	
	Objective: Increase the knowledge and ability of fishermen to deal with changes in circulation patterns and fish migration patterns					
10- 12 ha of coral reefs are recovered 3 youth groups are formed to save coral reefs - Providing direct benefits for 90 youth in the form of knowledge about benefits of coral reefs in terms of the environment and economy, as well as knowledge to carry out the coral reef rehabilitation.	0	12 hectares of coral reef area are rehabilitated 3 Youth groups are formed	Almost eight hectares of coral area was recovered through the placement of artificial reefs. Youth groups were enthusiast due to their increased capacity in terms of environmental recovery and potential of underwater tourism.	S	Although rehabilitation of coral reefs during MTR has not reached 12 hectares yet, but progress was made in terms of installation of artificial reefs to recovered the damaged areas. Youth groups were enthusiast due to their increased capacity in terms of environmental recovery and potential of underwater tourism.	N/A
	Objective: Strengthening the economic resilience of the community through the development of alternative economies in coastal areas that are resistant to climate by utilizing the economic potential of the coast.					
9 floating net cage fish cultivation - Direct benefits on 180 fishermen/ household (10%) in 3 Negeri. Community's income increased by +20% from the result of aquaculture fish cultivation	0	9 floating net cage (FNC) fish cultivation	FNCs in Asilulu were well managed by the fishers' groups, but in other 2 villages, FNCs are still facing challenges.	MS	The gaps of knowledge to manage FNC is the main challenges. Despite, fishers are	
9 floating rafts used to	0	9 floating rafts used to cultivate seaweeds	During MTR, the seaweed cultivate has	MS	The practice of seaweed cultivation is a new	N/A

cultivate seaweeds (3 rafts for each Negeri which for every Raft) • Direct benefits on 180 Women / Household (10%) in 3 Negeri. • Community's income increased by + 20% from the result of seaweeds cultivation			not been conducted yet due to delay from the seaweed supplier to deliver the seeds.		knowledge for most of the community in those villages. Therefore, the impact of increasing income of the community is unmeasurable in the near future, but will take a longer duration to see the result of the activity.	
Objective: Strengthening community resilience in the face of disasters through the construction of supporting facilities to minimize the impact of tides and waves						
There will be at least ± 500 m of sea retaining wall in improved 3 villages protecting the ± 1,6 km village road that lies along the seafront	0	500 m of sea retaining wall improved	The construction work took 90 calendar days to be completed. During MTR, the progress of the work was still on going.	S	In terms of quantity, the construction work could meet the target in terms of duration	The quality of the construction works need to be considered to guarantee the durability of the wall could last up to 10+ years.

Remaining barriers to achieving the Project Objective

At the AF Maluku project inception, the following barriers to sustainable management of the were recognized and highlighted in the Project Document:

- Weak inter-sectoral coordination at sub-national, regency and local (village) level
- Lack of access to environmental planning tools, technologies, and approaches for sound environmental management of the
- Insufficient baseline data

4.3. Project Implementation and Adaptive Management Arrangements

Finding
Rating: MS (Moderate Satisfactory) • Management arrangement • Work planning • Finance • Stakeholder engagement • Social and Environmental standards • Reporting • Knowledge and Communications • The MTR observed that the project has been effective in communication and promotion of its key messages to a variety of audiences. Furthermore, the MTR has found that external project communication is remain inadequate for demonstration of the project progress and its desired impact to the public. The presence of the project on social networks and internet helps to implement appropriate public outreach and awareness campaigns.

This section of the MTR report provides assessment of seven components of the project implementation and adaptive management, namely management arrangements, work planning, finance and co-finance, project-level monitoring and evaluation, management of risks, stakeholder engagement, as well as reporting and communications.

Management arrangements

The AF Maluku Project is being implemented under the NGO implementation modality. The project components are implemented through the standard National Implementation Modality (NIM) with Kemitraan co-support.

Kemitraan as the AF Executing Agency (EA) and HAI as the implement Agency (IA) for the project provides the assurance and project cycle management services. As such, Kemitraan holds overall accountability and responsibility for the delivery of results. Working closely with the sub-national and regency levels of Maluku Province, HAI also does the following:

- Consult with DKP Maluku Province on the provision of floating fish cage for communities, its management and market access.
- Ensures timely delivery of project results and achievement of the project objective,
- Oversees financial expenditures against project budgets and provides financial and audit services to the project including budget release and budget revision,
- Ensures that all activities including procurement and financial services are carried out in strict compliance with Kemitraan/AF procedures,
- Ensures reporting to AF in line with the AF requirements and procedures,
- Organizes the project Mid-term Review and Terminal Evaluation, and
- Triggers additional reviews and/or evaluations as necessary and in consultation with the project counterparts.

The AF Maluku Project structure is described in Figure 2 below.

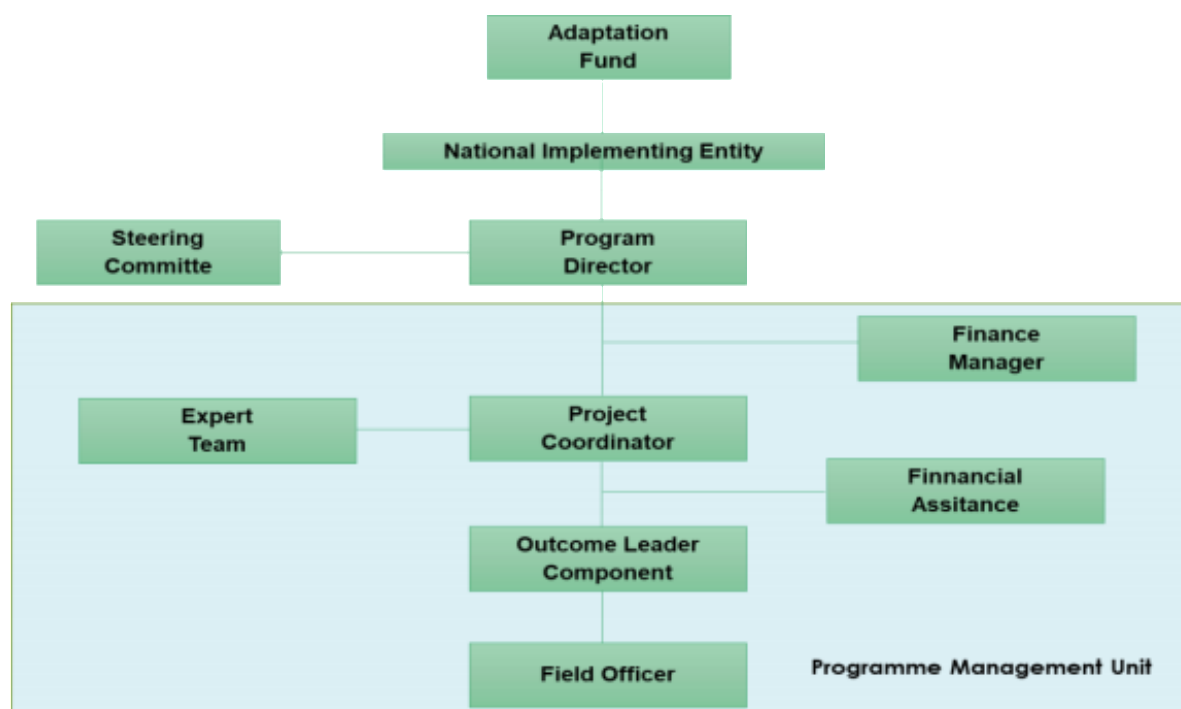


Figure 2. Organization structure for AF Maluku Project implementation and management

The project management and implementation structure are composed of the following elements:

- Steering Committee (SC) - will oversee the entire program implementation to ensure that the facilities and mechanisms have run the program effectively so as to achieve the desired results, while also representing the voices of stakeholders who are not directly responsible for the project. In the process of running the project, SC will provide technical guidance and advice to implementation program.
- Executing Entity – responsible for (a) Program preparation, including selecting PMU and linking the Steering Committee to the project, (b) Program implementation, including communication and coordination with the Steering Committee (c) Program monitoring and evaluation of PMU and (d) Financial monitoring and assessment of project implementation.
- Program Director - he Program Director will direct PMU in implementing the Program (1). Together with the EE in selecting PMU, (2). Together with PMU, the Program Implementation Plan will be prepared as a guide for implementing the program, (3). Ensure that the program is carried out in accordance with the objectives, (4). Together with the Kemitraan in monitoring progress and results of achievement and (5). Coordination Program progress and program problems to the Steering Committee.
- Team expert - Will be responsible for studies of (1). Mapping the fishing ground area, (2). Monitoring & Evaluation Specialist, (3). Social gender Specialist, (4). Coral Reef Restoration and (5). Fish Cultivation and seaweed.
- Finance Manager - will be responsible for financial and administrative management for the overall implementation of the program.
- Project coordinator – responsible for (1). Coordination with Outcome Leader Component in implementing the program, (2). Coordination with provincial and district governments (3). Ensuring the course of the program is in accordance with the goals and results to be achieved and (4). Report the program results in the Program Director.
- Financial assistance - responsible for financial and administrative management for program implementation in accordance with the direction of the Program Coordinator.
- Outcome Leader Component - responsible for implementing the program

- in the upstream section. (1). Together with the Coordinator Officer, the program implementation plan is planned as guideline for implementation (2). ensure that the program is carried out in accordance with the objectives (3). coordination of program progress and program problems with the Program Coordinator and (4). Coordination with the District Government.
- Field officers - come in direct contact with the beneficiaries for providing (1). communication with the community and (2). provide a report to the Coordinator Officer.

Work Planning

The MTR reviewed sets of project progress reports, annual reports 2022-2023 and found them sufficiently detailed not only for the planning of activities but also ready for use as monitoring tools for tracking progress in the project implementation.

Based on the above, the MTR team rates the project work planning **Satisfactory (S)**.

Finance

The tables below provide a summary of resources allocation for the project and of level of disbursement of the AF grant funds up to MTR.

Table 3 below displays breakdown of the AF project grant disbursements into the project components.

Table 4
Allocation and disbursement of AF funds (as of July 2024)

Project Component	Budget (IDR)	Expenditure (IDR)	Remaining Budget (IDR)	Delivery Rate (%)
Component 1	2,830,450,000	2,159,940,280	670,509,720	76,31
• Output 1.1	1.002.600.000	965.231.969	37.368.031	96,27
• Output 1.2	140,700,000	129,876,000	10,824,000	92,31
• Output 1.3	244,850,000	22,699,000	222,151,000	9,27
• Output 1.4	1,409,300,000	1,013,953,811	395,346,189	71,95
• Output 1.5	33,000,000	28,179,500	4,820,500	85,39
Component 2	1,684,028,500	936,393,248	747,635,252	55,60
• Output 2.1	1,502,278,500	759,079,747	743,198,753	50,53
• Output 2.2	181,750,000	177,313,501	4,436,499	97,56
Component 3	3,427,650,000	1,905,144,475	1,522,505,525	55,58
• Output 3.1	1,863,550,000	1,674,186,566	189,363,434	89,84
• Output 3.2	934,800,000	130,244,090	804,555,910	13,93
• Output 3.3	629,300,000	127,713,819	501,586,181	20,29
Component 4	2,367,601,795	925,416,313	1,442,185,482	39,09
• Output 4.1	2,367,601,795	925,416,313	1,442,185,482	39,09
Project Management	1,068,700,000	685,905,372	382,794,628	64,18
Total	11,378,430,295	6,612,799,688	4,765,630,607	58,11

The data in Table 4 shows that as of July 2024 the total disbursement of AF grant stands at IDR 6,612,799,688 corresponding to the overall rate of the AF grant implementation 58,11%. Given the fact that the project stands half-way through the implementation period, the overall implementation progress is above the optimal 50%. The budget allocation on Project Management is less than 10% of the total AF grant is in line with the AF rules for project budgeting.

Project-level monitoring and evaluation systems

The MTR found the design and implementation of the project performance monitoring and evaluation systems more or less in line with the AF Evaluation Policies. The M&E plan is sufficiently budgeted and funded during project preparation and implementation thus far and the allocation of resources is considered effective. The monitoring tools provide the necessary information. However, involvement of key stakeholders in M&E and alignment with national M&E systems were limited. The MTR did not find evidence of use of inclusive, innovative, and participatory monitoring systems by the Project Team. Also, the MTR team considers that additional M&E efforts should be put for greater involvement of relevant groups affected by the project. Overall, the monitoring and evaluation system of the project is rated **Satisfactory (S)**.

Project Progress Report (PPR): The AF M&E policy requires the PPR to be compiled on annual basis for each AF fiscal year and therefore cover the reporting period from August (previous year) to July (current year) for each year of the project implementation. Until the MTR, two PPRs were prepared that cover the period from the start of AF Maluku Project implementation until July 2024. The contributions to the PPR were provided by the PMU.

The MTR consultant found both PPR is in line with the standard PPR format with adequate level of details in narrative descriptions of achievements during the respective reporting periods, as well as justification of the ratings of progress in project implementation and of overall progress towards the project development objective. However, the numbering of the Outcomes in the PPRs does not correspond to the numbering of outcomes in the Project Document.

Identification and management of risks

The AF Maluku Project Document made several assumptions for the proposed project strategy and identified main risks associated with these assumptions. The risks were characterized and compiled into a risk matrix with 9 risks identified during the preparatory phase of the project. The risk matrix is composed of the risk description and type, assessment of risk impacts, and corresponding risk mitigation measures. The summary of the identified risks is in Table 4 below.

Table 4. Summary of identified risks

No	Risk Description	Risk Type	Risk Assessment
1	Stakeholders (Local Fishermen, Women Group, Costume/Traditional Figure, Youth, NGOs) do not support the proposed scheme	Organizational	Impact: Low
2	Political will of the government at the regional and District levels, and local government do not support the proposed scheme	Government	Impact: Low
3	Dispute over fishing grounds in a new fishing ground area	Environment	Impact: Low to moderate
4	Sea retaining wall/ <i>talud</i> construction uses sand, stone and cement material which has the potential to produce dust	Environment	Impact: Moderate
5	Pollution prevention and resource efficiency	Environment	Impact: Moderate
6	Access of women and vulnerable groups to get involved and benefit from project implementation	Social	Impact: Low to moderate
7	Price changes on materials used for project implementation	Financial	Impact: Moderate to low
8	Fraud and Corruption	Financial	Impact: Low
9	Human resource capacity	Organizational	Impact: Moderate to Low

The MTR consultant found the initial identification of risks and mitigation measures sufficiently detailed. However, the rating of the probability of risks at the project inception appears to have not been done thoroughly enough and some risks were underrated on probability. The MTR team considers that at least the risks #7 related to finance should have been rated higher in impact and probability and should have been subject to further monitoring as critical risks. Also, no owners of the risks were identified.

Based on the above, the MTR team rates the identification and management of risks as **Moderately Satisfactory (MS)**.

Stakeholder engagements

Consultation processes at the regional level carried out with key stakeholders, beginning with the preparation of program proposal in collaboration with the Institute Tifa Damai Maluku, Fisheries and Marine Service of Maluku Province, Fisheries and Marine Service of Central Maluku District, Government of Negeri Asilulu, Negeri Ureng and Negeri Lima, including establishing initial communication with the Climate Adaptation and Disaster Risk Reduction (APIK-PRB) Forum where the Institute Tifa Damai Maluku serves as Deputy Chairperson. During the implementation phase, gender consideration will become an important issue that is mainstreamed in every activity in the field.

Initial consultation with the Maritime Affairs and Fisheries Office of Central Maluku Regency was conducted in November 2018. The discussion and consultation were attended by the Head of the Maritime Affairs and Fisheries Office of Central Maluku Regency regarding development initiative on Climate Change Adaptation Program for Coastal Areas and Small Islands Sector in Negeri Asilulu, Negeri Ureng, and Negeri Lima. From the result of the discussion and the consultation, the Maritime Affairs and Fisheries Office of Central Maluku Regency provided a letter of support for this project.

In this project minority groups and communities were identified and that will be the object of the project by collaborating with local community organizations who are more familiar with the characteristics of these communities, including mastering their culture and customs. Consultation and communication as well as suggestions and input have been received through various representatives of the community, from fishermen groups, youth, and representatives of women's groups using the questionnaire method.

In implementing the project, the consultation activities involve a number of stakeholders, in order to support the RAN-API's vision and mission as a national target. Local communities are involved in key projects, problem identification, participatory mapping of potential vulnerabilities, and determining locations for implementing AF project. The Regional Government and the Government of the Three villages/ *Negeri* will be involved in providing data regarding community vulnerability, the potential for development, and possibilities for synergies in certain projects, providing training materials and reinforcing community capacity related to projects, mobilizing and planning follow-up programs post AF project. Academics, research and development institutions will provide technical support during project implementation, starting from mapping potential fishing ground areas, studying seasonal patterns, fish circulation and migration, advocating priority points for coral reef restoration, fish farming with aquaculture methods, and seaweed farming. Local non-governmental organizations will provide support to the activities, such as the development of coral reef lover groups, seaweed farmers, and women's empowerment, as the technical implementer and community mentor.

Social and Environmental Standards (SES)

In line with the requirements of the AF Social and Environmental Standards (SES) on screening and categorization of projects, the Environmental and Social Management Plan (ESMP) was completed during the project preparatory phase. As a result, AF Maluku Project was categorized as a Moderate Risk (Category B) project requiring targeted social and environmental assessment and review to determine how the potential impacts identified through the SESP will be avoided or when avoidance is not possible, minimized, mitigated, and managed. Further analysis may determine whether the project

categorization should be elevated for a full social and environmental assessment in order to ensure that the SES requirements are addressed.

Following the standard requirements for Moderate Risk projects, an Environmental and Social Management Plan (ESMP) was prepared in November 2023. The ESMP updated the potential environmental and social impacts and defined management measures as well as roles and responsible entities for their implementation, including arrangements for tracking progress of ESMP measures' implementation.

The MTR observes that the screening for identification of the project's potential social and environmental risks and their significance were conducted thoroughly, and AF Maluku Project followed the prescribed procedures for identification of potential social and environmental risks and their significance in order to maximize social and environmental opportunities and benefits and strengthen social and environmental sustainability.

Reporting

Reporting during project implementation helps to identify potential issues that may endanger the project's capacity to achieve its development objectives. Reporting also helps to make informed decisions, offers valuable information for project evaluation, and provides lessons to be learnt for future projects. Effective and timely communication between the PMU, the NEA and the core stakeholders is a key element in that respect.

PPRs are shared to the NEA and AF on an annual basis by email. Annual project progress vis-à-vis delivery of approved annual work plans (AWPs) was also reported at the annual NPB and SC meetings. A more popularized version of the project progress, challenges, lessons and some case studies are also packaged through the Annual Project Progress Report which are distributed through various channels and networks.

Communications and Knowledge Management

The project has used a variety of communication channels. The outside communication becomes very important in relation to demonstration of early results of AF Maluku Project and sharing of experience with other similar programs.

For engagement with third parties at the ground level, the project created a WhatsApp group platform for regular communication and coordination purpose. The platform is also used for exchanging files and other information and helps in coordination for submission near reporting deadlines. The main challenge in reporting is related to English writing when excessive time is spent for reviewing and addressing inputs before approval for submission.

The MTR observed that the project has been effective in communication and promotion of its key messages to a variety of audiences. Furthermore, the MTR has found that external project communication is remain inadequate for demonstration of the project progress and its desired impact to the public. The presence of the project on social networks and internet helps to implement appropriate public outreach and awareness campaigns.

Based on the above assessment of the 7 components above the overall rating Project Implementation & Adaptive Management rating is **Moderate Satisfactory (S)**.

Cross-cutting

Finding

Rating: S

The AF Maluku project emphasis on a gender equality perspective while ensuring to accommodate balanced numbers of women/men beneficiaries in the programme particularly when it comes to economic development, nonetheless, the AF Maluku still needs to assess gender-sensitivity of the programme results.

With a commitment to gender equality, the AF Maluku Project ensures a balanced representation of women and men officers, particularly in fishers groups and fish-based product groups. Data collected on indicators related to project activities is disaggregated by gender. The AF Maluku Project considers the distinct roles of men and women throughout the program, targeting both for culturally compatible social and economic benefits, while respecting their human rights. Prioritizing women-owned/led and youth-owned/led groups, including persons with disabilities (PwD), and establishing gender criteria for projects.

The monitoring efforts of the AF Maluku Project encompass diverse results by gender, employing disaggregated data, tracking progress markers, gender-specific evaluation questions, and a gender lens perspective in the analysis and reporting process.

At the level of participation, the project teams included gender-disaggregated data for participants of the various project events. And, there has been disaggregation of the gender data with relation to age, education, social status, and other categories.

The MTR field study found involvement of women at a certain level of activities. For instance, women were engaged in developing a seaweed cultivation business in, but their participation decreased along with time especially in preparation phase. Representation of women at the and project level in is quite good.

However, there is a recognized need to ensure a gender-equality perspective across the entire program lifecycle, extending to AF Maluku Project outcomes and outputs. This entails systematically identifying gender mainstreaming gaps, closing these gaps, and identifying approaches and best practices to enhance gender equality and women's empowerment through innovative fish-based products. This includes prioritizing financing allocation to human rights and gender equality and improving access to financial services for women-owned micro, small, and medium enterprises (MSMEs), among other strategies.

4.4. Coherence of the Program Design

Finding

Rating: MS

The AF Maluku project has successfully presented a transformational fieldwork in its goals, largely through the incorporation

of a diversity of funding sources which are prepared to commit significant amounts of capital towards the achievement of the SDGs upon demonstration of proof-of-concept for the proposed pilot activities in financial innovation. It also captures the barriers/problem analysis towards enhancing climate change issues in Indonesia and presented well-structured components in an integrated approach to achieve a transformational change. i

However, the design encompasses some flaws such as ambitious targets that may be challenging to achieve within the AF Maluku circumstances and timeframes, shortcomings in terms of not

identifying and addressing assumptions related to the readiness of local authorities and beneficiaries for Component 1 (the installation and management of FAD) and Component 3 (the installation and management of floating net cage by fisher groups). The defined indicators lacked utility in terms of providing guidance to the AF Maluku team on what needs to be achieved, and included fundamental flaws like irrelevance to the AF Maluku Project results and clarity.

The AF Maluku has been designed to be transformational in its goals, largely through the incorporation of a diversity of stakeholders including local governments in village and regency levels to commit significant participation towards the achievement upon demonstration of proof-of-concept for the proposed activities in climate change adaptation action.

The design and development of the AF Maluku Project were guided by comprehensive analyses conducted at the sub-national level by various implementing agencies. The AF Maluku design process involved consultations with the government, key partners, and the active engagement of local CSO and development partners. Notably, there was a robust sense of ownership of the AF Maluku by government bodies (village and sub-national levels) during the initial stages of program formulation.

The design primarily focused on the programmatic rationale and harnessed the comparative advantages to attain the expected AF Maluku Project results, with the potential to catalyze systemic change. The AF Maluku Project was specifically tailored to generate a higher level of collaboration than what regular project could deliver. This approach encourages robust coordination within the local government at sub-national and regency levels, expediting institutional and behavioral change. Consequently, the AF Maluku contributes to the attainment of climate change-related country priorities and outcomes, influencing changes in policy implementation, project budget allocations, and the adoption and scaling-up of proven solutions.

The AF Maluku design has successfully captured the barriers/problem analysis towards enhancing climate change issues in Indonesia, and in response the project design presented well-structured components to remove the identified barriers with specific activities leading to specific outputs and outcomes. The project design offers an integrated solution to achieve a transformational change in climate change sector.

To this end, there have been a number of weaknesses observed by the evaluation consultant, as follows:

- The AF Maluku theory of change (ToC) is grounded on a number of assumptions, while some assumptions are identified in the ToC, other key ones have neither been identified nor tested during the design stage, including:
 - ⇒ **Readiness for local government:** It was assumed that Indonesian authorities at the subnational and regency levels are at the same level of readiness and capacity as the national level to assist the implementation project at local level. Experience from AF Maluku implementation shows that local authorities have limited capacities and lack of long political commitment and stability at the local level to maintain the sustainability of the project.
 - ⇒ **Communities' readiness to implement project:** the AF Maluku Project found that communities (particularly fishers) were not yet ready to fully implement project activities specifically for sustainability although progress to conduct these activities are still on going. They needed to acquire some level of knowledge about sustainable fisheries (in terms of fish cultivation, institutional management, access to market fish-based products) prior to feeling more comfortable in providing relevant products and services.
- The targets set by the AF Maluku Project have proven to be overly ambitious within the current circumstances and timeframes (in particular Component 2, for coral reef restoration covering

the area of 12Ha in three villages). Achieving these targets necessitates the establishment of a long-term framework owned by the government. The AF Maluku Project role should incrementally create an enabling environment and enhance institutional capacities among stakeholders, fostering effective ownership and implementation of policies that extend beyond the confines of a specific project.

- The AF Maluku Project design didn't include Social and Environmental Safeguards (SES) exercise to identify any potential social and environmental impacts from the AF Maluku Project activities, although such impacts are unlikely, but such a due diligence would still be needed to anticipate the unexpected impact during project implementation.
- In terms of indicators, the evaluation consultant found it necessary to make adjustments to the wording of indicators, mainly to expand their scope, and numerical targets underwent reductions to align with the emerging circumstances.
- In addition to the JP changes on indicators, the evaluators noted the following flaws in the indicators:
 - ⇒ Indicator under component 2 (Outcome 2.1: Rehabilitation of ± 12 hectares of coral reefs in Asilulu and Lima villages in order to expand new fishing grounds near the shore) did not define the scope of rehabilitation areas, this leaves a room for different interpretations, whether to replace 12 hectares of damaged coral or 12 hectares coverage area where damaged corals located.
 - ⇒ Indicator under Component 4 for sea retaining wall works only focused on the quantity of the work without consideration of quality of work produced by the contractor.

4.5. Effectiveness

Finding
Rating: S The AF Maluku project has been generally effective in delivering activities despite shortcoming in achieving some of its targets. The effectiveness of the AF Maluku Project has been supported by effective stakeholders' engagement strategy and working closely with government agencies along with the good relationship and comparative long partnerships between the HAI and local CSO. On the other side, factors that hindered AF Maluku Project effectiveness include the substantive macroeconomic changes took place on the back of COVID locally and globally, limited awareness and knowledge about climate change adaptation action at the subnational level, limited capacity and preparedness of the local government to participate in the AF Maluku activities in addition to procedural complications in procuring expertise and engaging private sector efficiently.

The evaluation of the AF Maluku Project effectiveness was conducted through the results framework and the corresponding narrative report. Many interviewees acknowledged the significance of the goals, indicators, and work plans, emphasizing the crucial role played by HAI. The technical support provided by HAI and their capacity to strategically direct these elements to areas of utmost importance were recognized as pivotal factors contributing to the success of the AF Maluku Project, according to the perspectives shared by interviewees.

The project activities address capture fisheries sector, maritime affairs, alternative economic development, and social resilience as interventions in dealing with climate change. Funding from this project was effectively used with a budgeted structure of 20% - 30% for the development of soft skills and 70% - 80% for the physical development across the three villages. In this project, government

participation and support prioritized the promotion of program sustainability by integrating the project with village development programs.

Coral reef restoration in this project is deemed the top priority for rehabilitating underwater ecosystems, especially shallow marine waters, and will contribute to the capture fisheries sector and improve the economy of the community. There are considerations from costs of recovery and rediscovery of coral reef, which also offer economic benefits. The average cost for making Embankment is higher than the recovery of coral reefs, meaning that the coral reef restoration will better prevent the impacts of loss caused by waves.

Factors that have contributed to achievements

Based on data collected through the MTR, the following observations were made related to programme effectiveness:

- Effective stakeholders' engagement strategy and working closely with Government agencies for assisting communities in implementing the project activities. The programme has not only developed the capacity to address issues related to the climate change but has also played a role in shaping a shared vision for priority actions in this regard, contributing significantly to the country's advancement. The government and sub-national stakeholders are likely to sustain this momentum in the second half of the AF Maluku Project and beyond.
- The good relationship and comparative long partnerships between HAI and other CSOs and the government of Indonesia at sub-national and regency levels were a valuable asset for this AF Maluku Project. It is obvious that the coordination has evolved from previous AF Maluku Project experiences and built on lessons learned. This relationship has helped to build trust, cooperation and a shared vision on the importance of public project management for the achievements of the project outcomes. As a part of the coordination mechanism to ensure an integrated and coordinated implementation of the AF Maluku, the coordination meeting is scheduled to be conducted biannually to monitor and review the AF Maluku implementation as well as to provide strategic guidance to overcome any risks and challenges encounter by the AF Maluku Project.

Factors that hinder achievements

The KP has been challenged by a number of factors that either slowed down progress or hindered the achievements of the AF Maluku, these include:

- The post COVID substantive changes at the macro economy level globally and locally in Indonesia have impacted the AF Maluku Project in multiple ways. Consumer price inflation in Indonesia averaged 4.1% in the ten years to 2022, above the Asia-Pacific regional average of 2.1%. The inflation rate for 2022 was 4.2%¹⁰, but fell to 2.61% in December 2023¹¹. Indonesia's economic growth and progress to achieving the SDGs has been greatly impacted by the pandemic. Although positive signs of recovery have begun, full economic recovery is likely to take a long time. Globally, the cost of borrowing has been increasing as a result of economic volatility and global conflicts. And as debt rising and capital outflows, interest rates continue to rise globally, and this would have impact on the capital outflows intensifying as foreign portfolio investors will reduce their exposure to riskier assets in Indonesia. All of these factors not only limited the appetite of the investors but also affected the Government of Indonesia to reconsider reducing its borrowing capacities, especially as investors started to expect high revenues on bonds.

¹⁰ Focus economics – available [here](#).

¹¹ <https://tradingeconomics.com/>

- Due to a significant change in the exchange rate since the time the proposal was prepared, HAI was unfortunately unable to provide procurements of the goods in accordance with the technical specifications originally submitted. The fluctuation in the exchange rate has resulted in a very substantial price difference, making it no longer feasible for the supplier to deliver the goods as initially outlined. This unexpected shift in foreign currency values has created an untenable financial situation, forcing HAI to acknowledge that they cannot fulfill the original technical requirements agreed upon. The drastic change in the economic landscape has left HAI with no choice but to inform the client of their inability to proceed as originally planned and downgraded the specification in order to fulfill the amount of goods approved in the proposal. HAI understands the inconvenience this may cause the difference, and they are committed to working collaboratively to find an alternative solution that meets the beneficiaries' needs within the new budgetary constraints imposed by the exchange rate changes. Flexibility and open communication will be crucial as both parties navigate this unanticipated challenge together.
- The characteristics of the Maluku community are very diverse, the native population tends to work individually and make a living as fishermen. While the immigrant group (generally from Buton) tends to be less of a priority for the village government, because they are considered as immigrants who do not have land. So that the immigrant population tends to work hard, tenacious and more diligent. This perseverance often creates success and makes the native population jealous. It often also causes social friction in society.

4.6. Efficiency

Efficiency is defined as the extent to which results have been delivered with the least costly resources possible. Efficiency is a measure of how economically resources/inputs (funds, expertise, time, etc.) are converted into results.

The provision of technical assistance was highly professional, aligning well with the needs of communities. The budget utilization rate for the AF Maluku Project is deemed satisfactory, and the utilization of complete funding is on track as planned, so far 50% of the total budget have been either spent of the financial delivery. The AF Maluku Project successfully ensured efficiency and adaptive management.

The MTR affirmed that the AF Maluku Project secured competent technical staff, maintaining lean core teams in each outcome and outsourcing services for additional expertise when needed. This structure effectively addressed personnel needs related to policy and system strengthening, as well as technical support for innovative climate action modelling.

While the program's composition and structure were conducive to achieving results, deeper collaboration across components could have enhanced the full potential of the AF Maluku model. Although structured by themes/components, the division among component leader portfolios maintained essential elements, such as a network of partners and strategic positioning. However, the program struggled to ensure a more holistic approach, prompting a call for consolidation through a stronger focus on cross-sectoral engagement with less emphasis on thematic approaches.

On the timeframe, the AF Maluku Project has been going through considerable delays due COVID, team assembly and lengthy procurement and due diligence procedures. Given the level of delivery on targets and financial delivery, it is unlikely that the AF Maluku activities and targets are fully achieved by August 2025 as planned. No extension of cost and duration is recommended by the MTR consultant and will enable the AF Maluku Project to implement its activities, achieve targets and develop and implement an appropriate exit strategy.

Given the above, the efficiency of implementation met expectations with some shortcomings (delays). Therefore, the overall ranking of efficiency is **Satisfactory (S)**.

4.7. Sustainability

The sustainability is defined as continuation of benefits from an intervention after the development assistance has been completed. The important aspect here is the sustainability of results, not necessarily sustainability of the activities that had produced the results. The assessment of sustainability requires evaluation of risks that may affect the continuation of the results.

The Project Document stipulates that sustainability of the project results beyond the project duration will be ensured through implementation of the project solely, that is through institutional strengthening at local levels coupled with a strong resource mobilization strategy and establishment of financing mechanisms for gradual rolling out of the strategic action program.

In addition, the project's approach to generating interlinked global environmental and local socioeconomic benefits is expected to leverage interest and support from the target local communities for adoption of measures and area-based management of critical habitats important for food security and the environmental status. In general, the project interventions have the potential to ensure long-term sustainability of results. However, in order to fulfil this potential, due consideration should be given to the serious risks and challenges that are discussed below.

Financial Sustainability

While there is an overall likelihood that the various AF Maluku Project's products such as management approaches and ecosystem assessment studies will be sustained after completion of the AF Maluku project, the main challenge to financial sustainability is the possible lack of funding for operation of the project due to currency exchanged rate used in the project budget and for implementation of the remaining end-of-project target.

Endorsement of AF Maluku Project and active participation in it by the governments of the 3 villages and the government at regency level can be considered as a sort of commitment for future financing but as such can't be considered sufficient if not accompanied by other concrete steps. However, lack of detailed co-financial information under AF Maluku \ contributes to uncertainty about the likelihood of available financial resources beyond the time boundary of the AF assistance. This uncertainty justifies the need for potential AF Maluku second phase to support mainstreaming of the regional governance mechanism (RGM) and updated strategic action program into the budget frameworks of the participating governments.

Based on the above, financial sustainability is rated **Moderately Likely (ML)**.

Socio-economic sustainability

The socio-economic risk to sustainability is high due to income disparities and relatively large section of population in the ATS coastal areas living below the poverty line. Moreover, awareness at the project sites for the local communities to support the project seems to be in many cases lacking as demonstrated by decreased participation (especially by the community whose origin is from the village/ *anak negeri*) in capacity building and training events as well as implementation of the project.

This finding proves the need for improved outreach and through enhanced capacity building coverage. The project captures key experiences, lessons and results from various project sites and initiatives through its quarterly progress report, annual project progress report, and will continue to assess means to further strengthen wider information reach to support efforts in building awareness, transferring knowledge and promote replicability of best or good practices.

The project has developed several management plans for marine and coastal ecosystems, particularly the intervention of coral rehabilitation for further undersea tourism purpose with the aim to integrate these plans into governmental programs at sub-national and local level. However, this process is far from being straightforward as it depends on the level of ownership and buy-in of the project interventions by the target population. Nevertheless, lessons learned and the project's successful aspects are being documented on a continued basis through several knowledge products made available to wide audiences including potential future beneficiaries.

The MTR had made observations on insufficient ownership by population by some local governments and communities, sites, i.e., fishers' group (*anak negeri*) communities in Lima village who manage FAD. Local ownership can be increased by demonstrating value achievements and progress. Also, building partnerships with private sector, community-based organizations and local universities can help to increase the local ownership of the project results.

Furthermore, MTR observed that various key stakeholders have good interest in having project benefits continue to flow; however, important efforts need to be made to increase the quality (not quantity) of public and stakeholder awareness actions in support of the long-term objectives of the AF Maluku Project.

Based on the above, the socio-economic sustainability of the project results is rated **Moderately Likely (ML)**.

Institutional Framework and Governance Sustainability

AF Maluku Project is contributing to harmonization of the existing national regulatory and institutional frameworks related to coastal and marine management in the 3 beneficiary villages. However, due to the relative complexity of the national legislative approval procedures, the process leading to approval of the various management plans and their incorporation into the legislation and sub-national as well as local level is a gradual and time-consuming process.

The existing national institutional frameworks for marine and coastal management in Indonesia appear to be relatively strong as a result of continued international development assistance. AF Maluku Project has made a tangible contribution to strengthening the national institutional and governance frameworks. Interviews with stakeholders in three villages hinted that many institutions involved in implementation of the various management plans still do not have sufficient capacity and in some cases are seriously understaffed. While the project in its remaining period can address the capacity building, staffing of responsible agencies is beyond the assistance the project can provide. At the regency level, efforts and consultations are ongoing with support from sub-national government staffs to support the establishment of a governance mechanism.

The MTR also observes connection between the developed policies (including *sasi laut*) and action plans and their practical implementation. The project has supported discussions on integrating enabling policies and regulations into national and subnational institutional frameworks. As of yet, however, there is no evidence of integration of the policies and plans into the national legislations. Even if this integration occurs, the success in implementation heavily depends on the ability to enforce the updated legislation. There is no assistance provided by the project on enforcement. Successful implementation and enforcement of local regulations and plans will be important element of their replication or scaling up, as well as their integration into national and subnational institutional and policy frameworks.

Another risk to institutional frameworks and governance could be insufficient ownership of the strategic action program processes by provincial and district government administrations. This risk could be particularly high in complicated legislative and governance systems based on decentralization such as those in Indonesia.

Based on the above, the institutional and governance sustainability of the project results is rated **Moderately Likely (L)**.

Environmental Sustainability

The AF Maluku project's assistance is critical for decreasing pressures on critical habitats and ecosystems through implementation of fishery improvement approaches. The project is also helping to prioritize national efforts at reducing impacts from climate change. These efforts contribute to reducing pressures on coastal and marine ecosystems and enhance the likelihood of environmental sustainability.

Based on the above, environmental sustainability of the project is rated **Moderately Likely (ML)**.

Based on the aggregated assessment of the four sustainability categories above, the MTR consultant assigns the overall rating for sustainability as **Moderately Likely (ML)**.

5. CONCLUSIONS AND RECOMMENDATIONS

Based on the previous section of the fact findings, this section synthesizes and interprets the findings into conclusions that make judgments supported by the findings from the previous section. Recommendations are then specific actions the MTR team proposes to be taken by various project stakeholders that are based on the findings and conclusions.

No	Conclusion	Recommendation
1	MTR concluded that the activity under component 1 of the project are not fully achieved. Consequently, if output 1.1 is not completed, will affect output 1.2 and 1.3.	- Fishing ground map needs to be distributed and placed in strategic locations such as at the village offices. - Installation of FAD in 2 villages (Asilulu and Ureng) shall be conducted prior to the beginning of east season, to ensure that fish will be attracted and avoid the windy season. - Location and legal status of land to be constructed for cold chain purpose should be cleared prior to construction process to avoid misunderstanding among stakeholders.
2	The involvement of women in project activities has showcases the mainstreaming of gender has been conducted in the project. Not only in terms of quantity but also the enthusiasm of women to join the cultivation activity to increase their income.	To ensure seaweed cultivation is successful, the assistance on seaweed planting shall be conducted at least for 1 season in 3 villages. More capacity buildings are needed such as increasing the quality of harvested seaweed, harvesting seaweed, post harvested management of seaweed, and marketing strategy.
3	Although the objective of component 3 of the project aims to increase income from various sources including FNC and fish-based food business, to reach the outcome and impact of this intervention needs a longer duration.	The quality of fish-based products shall be increased in order to ensure that the products are accepted by the market in terms of quality and price.
4	This program is repairing + 500 M of damaged Embankment along the shoreline of 3 villages, which will only prioritize the most vulnerable points in order to support the community activities. However, this activity faces some challenges such as: the lack of public awareness to safeguard the sea as a sustainable resource,	Sea retaining wall rehabilitation project using cast concrete is made necessary due to repeated abrasions on the Embankment. Several parts of Embankment are weather beaten, thus unable to achieve maximum efficiency. The sea retaining wall work should not only be focusing on the quantity of the work but also the quality of the work conducted by the contractors

	2) the lack of knowledge on the management and utilization of existing resources, 3) limitations on equipment and technology used by fishermen that affect the expected yield, 4) the community's ignorance on the impacts of climate change which will make it difficult in identifying problems occurring in the field	to ensure the durability of the wall could last at least 10 years from the commissioning period.
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Annex 1

Term of Reference Mid-Term Evaluation

Terms of Reference
Mid – Term Evaluation AF-Maluku Project
Enhancing The Adaptation Capability Of Coastal Community In Facing The
Impacts Of Climate Change In Negeri (Village) Asilulu, Ureng And Lima Of Leihitu
District Maluku Tengah Regency
Maluku Province

1. Informasi Singkat Evaluasi

Proyek	Enhancing The Adaptation Capability Of Coastal Community In Facing The Impacts Of Climate Change In Negeri (Village) Asilulu, Ureng And Lima Of Leihitu District Maluku Tengah Regency Maluku Province
Fase Proyek	September 2022 – Agustus 2025
Tipe Evaluasi	Mid-term Evaluasi
Tujuan Evaluasi	1. Membantu HAI dalam melaksanakan evaluasi capaian dan disain program AF Maluku di 3 Negeri (Negeri Lima, Asilulu, Ureng) 2. Mendapatkan pembelajaran dari pelaksanaan program AF dari sisi teknis implementasi dan manajemen program 3. Mendapatkan rekomendasi strategi implementasi program untuk fase berikutnya.
Metodologi	Kualitatif dan Kuantitatif
Periode Evaluasi	September 2022 – Februari 2024
Durasi Pelaksanaan Evaluasi	1 bulan (13 Mei 2024 – 13 Juni 2024)
Laporan Evaluasi	13 Juni 2024

2. Latar Belakang Evaluasi

Proyeksi perubahan suhu rata-rata Maluku ke depan, yang ditunjukkan dalam statistik downscaling dari Model Iklim Global IPCC yang dilakukan oleh Gede Junnaedhi dan Joko Trilaksono pada tahun 2017, menunjukkan peningkatan suhu dari 0,5 °C menjadi 1,5°C. Grafik proyeksi rata-rata tahunan pada tahun 2025 menunjukkan peningkatan suhu minimum yang merupakan tanda bahwa Maluku telah mengalami perubahan iklim. Hal ini mempengaruhi potensi bencana alam yang berisiko tinggi, seperti banjir di beberapa wilayah Maluku.

Hasil lokakarya studi kerentanan tahun 2017 (BAPPEDA, 2017) menunjukkan bahwa kabupaten di Maluku Tengah memiliki kerentanan yang sangat tinggi di sektor perikanan tangkap. Perubahan suhu telah mempengaruhi penurunan zona upwelling ikan (tempat mencari makan), pergeseran populasi ikan ke laut yang lebih dingin atau lebih hangat dan peningkatan gelombang laut. Perubahan dan variasi iklim pesisir dan laut berdampak pada ketidakpastian waktu dan wilayah penangkapan bagi nelayan, sedangkan sebagian besar nelayan di wilayah ini masih menangkap ikan secara tradisional dan konvensional.

Annex 2

Key questions of the MTR

No	Kriteria Evaluasi	Pertanyaan Kunci	Indikator Evaluasi
1	Relevansi	• Sejauh mana outcome program mensupport RAD API? • Seberapa relevan perubahan yang dihasilkan oleh program yang dapat mendukung partisipasi dari perempuan dan vulnerable group?	• Objective AF Program • Relevansi desain proyek (analisis konteks, prioritas, dan penilaian kebutuhan)
2	Eefektifitas	• Sejauh mana tujuan keseluruhan tercapai? Apa faktor utama yang mempengaruhi pencapaian atau tidak tercapainya tujuan (misalnya, terkait dengan kapasitas tim)? Kegiatan yang seharusnya ditambahkan untuk mencapai tujuan. Bagaimana sinergi dengan tindakan lain yang dipimpin oleh aktor lain (organisasi) dan proyek lain yang dipimpin oleh HAI menambah pencapaian tujuan ini? • Apakah ada area yang dapat memperoleh manfaat dari dukungan teknis yang sesuai/lebih lanjut? • Apa metodologi dan pendekatan paling efektif yang digunakan organisasi untuk membawa perubahan? Apa yang berhasil dan apa yang belum? Pelajaran apa yang telah dipetik? Dengan siapa mereka telah dibagikan? • Dengan cara apa pengembangan kapasitas kelompok rentan berkontribusi pada perubahan dalam program adaptasi perubahan iklim Kota Ambon dan Kabupaten Maluku Tengah?	• Proses untuk menformulasikan objective dan output • Output yang dihasilkan oleh kegiatan program • Alasan yang menyebabkan tercapai atau tidak tercapainya output • Benefit utama yang diberikan kepada populasi target • Hasil yang tidak diharapkan/tidak direncanakan
3	Efisiensi	• Apakah metode intervensi yang diusulkan mencapai hasil yang diharapkan dengan biaya terendah? • Proyek ini fleksibel dan beradaptasi dengan kebutuhan dan risiko yang berkembang (kendala dan peluang operasional) • Apa saja tantangan (operasional) yang dihadapi selama periode implementasi, dan solusi yang pelaksana program tempatkan/seharusnya sudah ada untuk mengatasinya • Sumber daya yang diperlukan dimobilisasi dan dioptimalkan di seluruh proyek	• Hambatan utama yang dihadapi oleh manajemen proyek • Prosedur administrasi termasuk prosedur procurement • Training • Monitoring dan pelaporan • Budget dan pengeluaran proyek

		• Tim proyek dan dukungan (Pelaksana dan mitra) mengetahui peran mereka dan menawarkan kontribusi yang tepat waktu, hemat biaya, dan berkualitas (operasional, keuangan) • Kontrol diberlakukan untuk memantau kegiatan, kepatuhan terhadap aturan dan efek program, memungkinkan tindakan korektif diambil jika diperlukan	
4	Dampak	Program ini membawa perubahan jangka pendek dan menengah yang positif dalam kehidupan penerima manfaat dan keluarga mereka. ➢ Fokus pada dampak positif dari kehidupan penerima manfaat dan keluarga mereka ➢ Apakah program ini berkontribusi pada pemberdayaan nyata yang berkelanjutan terhadap adaptasi perubahan iklim ? a. Program ini membantu membawa efek positif jangka panjang pada kehidupan penerima manfaat dan keluarga mereka b. Setiap perubahan negatif yang mungkin ditimbulkan oleh program (lingkungan, ekonomi, konflik, dll.) dihindari, diminimalkan, atau diimbangi.	• Dampak yang diterima oleh penerima manfaat program
5	Keberlanjutan	• Sejauh mana hubungan antara implementasi dan operasional saling mendukung? • Bagaimana engagement pemerintah daerah untuk ikut terlibat dengan program AF?	• Kontribusi pemerintah daerah dalam isu adaptasi perubahan iklim

Annex 3

List of People Interviewed

No	Interview Date	Name of Interviewee	Gender		Institution/ Position
			Male	Female	
1	21 August 2024	Idham Gufan Nawangga	x		HAI executive director
2	26 August 2024	Ryan Hidayat	x		Project coordinator
3	26 August 2024	M Khalim	x		Project officer
4	26 August 2024	M Yunus	x		Project officer
5	26 August 2024	Aisa Lantupa		x	Ureng
6	26 August 2024	Misna Wael		x	Ureng
7	26 August 2024	Sintia Aprianti Husein		x	Ureng
8	26 August 2024	Fatmawati Laisouw		x	Ureng
9	26 August 2024	Jamal Riry	x		Project officer
10	26 August 2024	M. Yudha Rumakat	x		Project officer
11	26 August 2024	Maimunah Pelupessy	x		Project officer
12	26 August 2024	Mochtar	x		Ureng
13	26 August 2024	Ateng Wangsi	x		Ureng
14	26 August 2024	Rahmat Ely	x		Ureng
15	26 August 2024	Any Baeko		x	Ureng
16	26 August 2024	Wirda Salong	x	x	Negeri Lima
17	26 August 2024	Imran Soumena	x		Ureng
18	26 August 2024	Saleh Laturise	x		Ureng
19	26 August 2024	Syartika Soulisa	x		Ureng
20	26 August 2024	Ihsan Pirasou	x		Ureng
21	26 August 2024	Abdul Latip	x		Ureng
22	27 August 2024	Husen Pasarwaso	x		Kasuari
23	27 August 2024	M Saleh Kibas	x		Asislulu
24	27 August 2024	Abd. Mutalip Ely	x		Asislulu
25	27 August 2024	Siti Jana Layn		x	Asislulu
26	27 August 2024	Laibi Wabula	x		Kasuari
27	27 August 2024	J Soumena	x		Asislulu
28	27 August 2024	Asdat H Ely	x		Asislulu
29	27 August 2024	Riman Ely	x		Asislulu

Annex 4

List of Document Reviewed and Consulted

1. HAI Annual Report Year 2023
2. HAI Proposal to AF and LFA
3. HAI Financial Report
4. Quarterly Report Q1 – Q7
5. Workplan

Annex 5

List of Itinerary

**Daftar Itinerary kegiatan Triangulasi Data Project AF Maluku Tengah
Yayasan Harmony Alam Indonesia (HAI)**

Hari	Tanggal	Jam	Kegiatan
Kamis	22-8-2024	10.00 – 15.00	Interview dgn HAI
Minggu	25-8-2024	10.00 – 15.35	Perjalanan JKT-Ambon GA-646 10:00 – 15:35
Senin	26-8-2024	07.00 – 09.00	Perjalanan ke Negeri Lima
		09.00 – 12.00	Diskusi kelompok dengan perwakilan Negeri Lima untuk topik2 sebagai berikut: ☐ Rumpon & Cold storage ☐ Terumbu karang ☐ Budidaya perikanan & rumput laut ☐ Talud
		12.00 – 13.00	Ishoma
		13.00 – 16.00	Diskusi kelompok dengan perwakilan Negeri Ureng untuk topik2 sebagai berikut: ☐ Rumpon & Cold storage ☐ Terumbu karang ☐ Budidaya perikanan & rumput laut ☐ Talud
		16.00 – 17.00	Data collection hari#1 selesai Menginap di Lima/Ureng/Asilulu
Selasa	27-8-2024	08.00 – 11.00	Diskusi kelompok dengan perwakilan Negeri Assilu untuk topik2 sebagai berikut: ☐ Rumpon & Cold storage ☐ Terumbu karang ☐ Budidaya perikanan & rumput laut ☐ Talud
		11.00 -13.00	Perjalanan kembali ke Ambon & makan siang
		14.00 – 16.00	Pertemuan dengan DKP kota Ambon
		16.00	Pengumpulan Data hari#2 selesai Menginap di Ambon
Rabu	28-8-2024	08.30 – 09.30	Pertemuan dengan PUPR Provinsi Maluku
		09.30 - 10.30	Pertemuan dengan LPMUKP (akses permodalan)
		10.30 – 12.00	Pertemuan dengan satker BBP3KP
		12.00 – 13.00	Pengumpulan data hari #3 selesai Ishoma
		14.00 – 16.00	Persiapan kembali ke JKT
		16.20 – 17.45	Perjalanan Ambon – JKT GA-647 16.20 – 17.45

