

Darwin Initiative Main and Post Project Annual Report

To be completed with reference to the “Writing a Darwin Report” guidance: (<http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms>). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2020

Darwin Project Information

Project reference	26-011
Project title	Strengthening fisheries resource co-management in PiSiSi MPA, Simeulue Island
Country/ies	Indonesia
Lead organisation	Fauna & Flora International
Partner institution(s)	Aceh Marine Fisheries Agency (DKP) Flora Fauna Aceh (Flona) Panglima Laot / Sea Commander Syiah Kuala University
Darwin grant value	GBP. 338,063.00
Start/end dates of project	01 April 2019 - 31 March 2022
Reporting period (e.g. Apr 2019 – Mar 2020) and number (e.g. Annual Report 1, 2, 3)	April 2019 – March 2020
Project Leader name	Teuku Youvan
Project website/blog/social media	www.fauna-flora.org
Report author(s) and date	Teuku Youvan; Rakhmat Dirgantara; Henry Duffy.

1. Project summary

In 2018, the Aceh government reserved 4 marine protected areas (MPAs) in Simeulue for designation process by central government, namely; Pulau Pinang, Pulau Sumat and Pulau Simanaha (PiSiSi); Pulau Simeulue Cut; Simeulue Barat; and Pulau Batu Berlayar. For this project agreement, FFI is focusing on PiSiSi MPA which covers 5 out of 26 villages with a population of 3,279. The location of the project site is indicated in the map below:

Surveys indicate that over 65% of global coral species occur in PiSiSi MPA, with high coral cover and 162 recorded reef fish including threatened sharks and groupers. In addition, the protected zone encompasses mangroves and seagrass. This biodiversity also provides vital marine resources to more than twenty communities with traditional fishing grounds within the MPA. However, MPA compliance is low, and long-term illegal and destructive fishing undermines management, with compressor fishing dominant. According to Gaol¹ (2015), the primary poverty

¹ Gaol, J. (2015) *Analisi Faktor-Faktor yang mempengaruhi pendapatan nelayan jermal dan kapal motor <5GT di kecamatan Simeulue Timur Kabupaten Simeulue Provinsi Aceh*
<http://repository.ut.ac.id/6393/1/42448.pdf>

driver for Simeulue fishing communities is environmental degradation. Catches have declined due to destructive fishing in the MPA, and associated livelihoods are hampered by inequitable relationships, thin margins, high transport cost, low market literacy and weak quality control.

Attempts to address destructive fishing are jeopardised by limited capacity of district marine authorities, low enforcement and weakening of traditional fisheries tenure, partially due to the 2004 tsunami in which many traditional leaders. Increasing encroachment by non-local fishers also undermines traditional management. Nested within the MPA, Locally-Managed Marine Areas (LMMAs) are based on traditional fishing grounds which are recognised by the *Panglima Laot*² and local government. To date only two LMMAs are formalised within PiSiSi MPA, and there is still a significant threat to the access of local communities who rely on MPA resources. FFI and partners have identified these problems through over a decade of working alongside Acehese coastal communities, and the project is designed to address these key challenges.

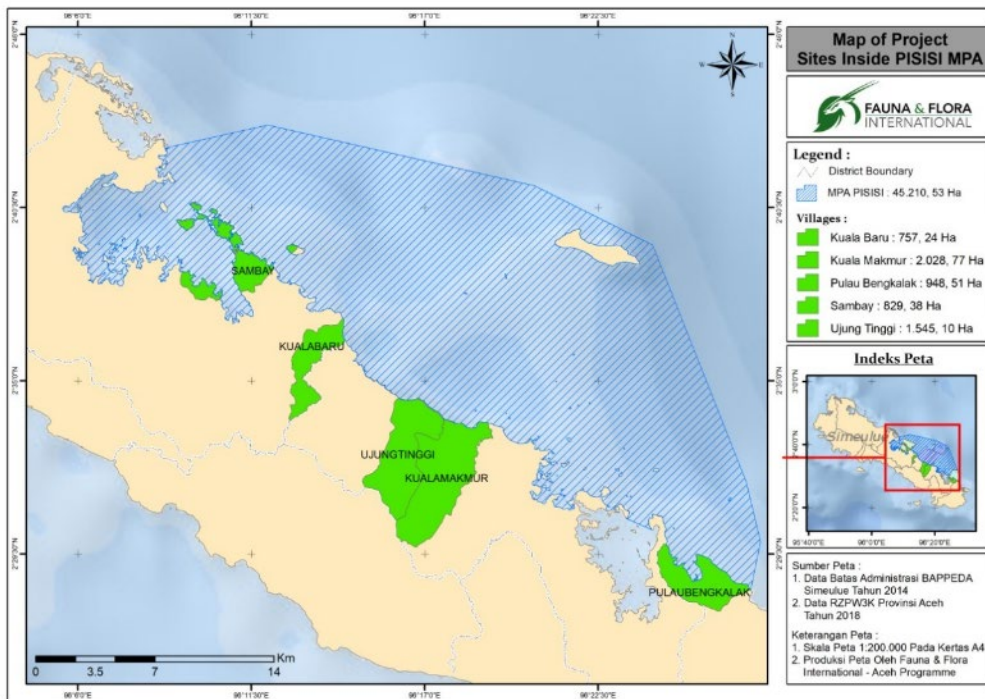


Figure 1. The location of project communities (green) within PiSiSi MPA (blue cross-hatching).

2. Project partnerships

FFI has been actively collaborating with the Ministry of Maritime Affairs and Fisheries (MMAF) and its representatives at regional, provincial and district level. In addition, FFI has been working with the University of Syiah Kuala (Unsyiah) and community-based organizations (CBO) such as Flora & Fauna Aceh (Flona) and *Panglima Laot* from the 5 target Villages (Kuala Baru, Kuala Makmur, Ujung Tinggi, Pulau Bengkalak and Sambay).

- During this reporting period FFI collaborated with marine and fisheries agencies extensively at provincial and regional level, to connect MPA management activities in Simeulue with wider marine protection networks across Sumatra. Specifically, FFI worked with marine conservation NGOs (WWF and WCS), the Marine and Fisheries Agency Aceh (DKP Aceh), and others stakeholders as part of a long-running Aceh MPA Taskforce. This taskforce facilitates cross-sectoral collaboration to support MPA designation and management across the province. In addition, on September 26 2019 FFI joined a meeting in West Sumatra to accelerate MPA designations at regional level. The meeting was conducted at the offices of the Coastal and Marine Resource Management Center (BPSPL, Padang - see Figure 2).

² *Panglima Laot* translates as “Sea Commander”. The *Panglima Laot* is the traditional fisheries management body at village level in Aceh Province, and therefore a critical partner.



Figure 2. Meeting with BPSPL Padang to accelerate the MPA designation process

Based on the discussions during the 26 September meeting, on 04 – 06 November 2019 the FFI Team collaborated with DKP Aceh to conduct community meetings and public consultations to formulate the zonation plan of PiSiSi MPA. As a result of these meetings, the communities and *Panglima Laot* from 26 villages agreed a zonation plan and utilization plan inside the PiSiSi MPA for approval by the national Marine and Fisheries Minister. This zonation plan was submitted (*Appendix 1. Supporting Document for PISISI MPA Designation*) to the national ministry and evaluated on February 20, 2020. FFI attended the evaluation process during which all parties agreed to allocate 2.134,71 ha of no take zone / core zone from a total area of 45.418,52 ha of PISISI MPA as a requirement from MMAF at minimum of 2% coverage. The designation decree will be published soon, pending government process.



Figure 3. Evaluation of the Zonation Plan with Marine and Fisheries Ministry Affairs

- On October 29, 2019 the Governor of Aceh declared a new taskforce for tackling destructive fishing practices by decree (*Appendix 2. DF Taskforce Decree*). The taskforce consists of 3 segments; data and information, law enforcement and sustainable livelihoods. This taskforce involved stakeholders from the water police, navy, NGOs and Unsyiah. Currently, FFI is working with other partners to prepare the 5-year provincial action-plan for tackling destructive fishing, which is expected to be completed by the end of 2020. Once ready, FFI, together with other NGOs, will assist by supporting the taskforce with data & information and sustainable livelihood programs where relevant within FFI's project sites (Simeulue MPAs).



Figure 4. Meetings with destructive fishing taskforce

- On October 9, 2019 the *Panglima Laot* from the project's 5 target villages received the mandate from the Simeulue DKP, based on Decree No. 523/813/2019, to be community oversight groups (known in Indonesia as POKMASWAS (see [online article](#)). This aims to increase the effectiveness of marine and fisheries resources management in PiSiSi MPA based on a patrol and surveillance scheme. In addition, the Panglima Laot will adopt the LMMA management planning and customary law concept for managing their traditional fishing grounds within PiSiSi MPA.
- On July 1st 2019 Flona implemented the knowledge, attitudes and practices (KAP) survey in PISISI MPA. This activity aims to collect basic information on knowledge, attitude, and practices of local populations related to the LMMA concept. During the assessment Flona encountered some important issues related with the local understanding of Panglima Laot, ecological functions and sustainable fisheries. The recommendations have been submitted to FFI for development of training modules.
- On September 1st 2019 Unsyiah participated in coral reef surveys in PiSiSi MPA and LMMAs. As well as survey implementation, Unsyiah also provided data analysis and survey reports. The survey team consisted of 6 people: 1 lecturer, 2 reef fish observers and 3 benthic reef observers. The detailed activities of Unsyiah in supporting the project are to: (1) compile and adjust technical approaches suitable for the project's objectives; (2) determine the survey method in accordance with the characteristics of the site; (3) provide certified coral reef observers for surveys; (4) planning and training related to survey delivery; and (5) assisting with analysis and reporting.



Figure 5. FFI and Unsyiah collaboration in the Coral Reef Survey

3. Project progress

Five villages have been identified for LMMA establishment and co-management; Kuala Baru, Kuala Makmur, Ujung Tinggi, Sambay and Pulau Bengkalak, with a population of around 3,279 based on primary data collection. Some field interventions in March 2020 were postponed due to the COVID-19 outbreak, these are identified below.

3.1 Progress in carrying out project activities

Output 1: By 2022, five coastal communities are engaged in co-management of new LMMA (Lhok) areas within PiSiSi MPA

- *Activity 1.1 Conduct Knowledge, Attitudes and Practices (KAP) surveys in target communities at project start and end.* The KAP (Knowledge, Attitude and Practice) survey was conducted between 1 July – 30 September 2019 in 5 target villages and 10 schools, with the involvement of project partner Flona. KAP survey activities are shown in Figure 6. The KAP Survey assessed demography, influence of traditional institutions, as well as knowledge of ecological function, utilization of marine resources, conservation and communication channels for the 5 target villages (*Appendix 3. KAP Survey Report*). The total respondents were 334 (166 men and 168 women, representing 10% of the target village populations). The KAP survey report is finished, and based on this, FFI is ongoing to develop training packages with the involvement of village committees and teachers (*Activity 1.2*).



Figure 6. KAP surveys in target communities, led by Flona staff.

- **Activity 1.2 Delivery of training and outreach in target communities to socialise LMMA concept.** Based on the KAP survey, FFI has started development of modules for schools and fisher's community. At this time of reporting, the module is in final draft with some materials still under development. The field intervention for implementing the ToT for the selected fishers from 5 villages and teachers from 10 schools is planned for May 2020 depending on the Covid-19 situation. At this time, all of communication related with the assignment are being conducted virtually due to Covid-19 restrictions.
- **Activity 1.3 Support the formation of LMMA management committees headed by Panglima Laot representatives.** On September 9, 2019 FFI introduced the project objectives alongside the approaches to be implemented in target villages. At this event, FFI also established LMMA management committees in the five target villages, headed by *Panglima Laot*. Based on the project agreement, FFI has facilitated representation of 15% of women / poorest³ inside the committees in 5 villages (*Appendix 4. LMMA Management Committee*). All committees agreed to cooperate in forming LMMAs based on a participatory planning process, in order to develop management planning of traditional fishing areas, set up boundary demarcation and achieve customary law consensus. LMMA socialisations and committee meetings are shown in Figure 7.



Figure 7 Socialization LMMA concept and formation of LMMA management committee led by *Panglima Laot*.

In these forums in Pulau Bengkakak and Sambay, the head of the village also initiated the election of the new *Panglima Laot*, which had previously been inactive. The fisher's community were satisfied with the newly elected *Panglima Laot* and ready to maintain their LMMAs under the new formation.

- **Activity 1.4 Conduct Participatory Rural Appraisal (PRA) of traditional fishing areas, priority habitats and other factors influencing LMMA zonation and designation.** The PRA process was started in 5 villages in August 2019. This PRA approach aims to study the environment, social factors and economy of target villages. This will describe the community profile, and enhance the active role of the entire community, and will assess management potential,

³ "Poorest" was defined according to an individual's access to suitable fishing equipment and motorised fishing vessels, in consultation with community leaders.

fisheries resources, key threats and investment opportunity for village government funds to support LMMA management plans. As part of the PRA, FFI used the tools of; historical profile, historical transect, organizational chart, seasonal calendar, list making, and trend line. The marine and fisheries resources profile formulated for 5 villages alongside with the village mapping are included in [Appendix 5. PRA Report](#).

- *Activity 1.5 Support formal designation of LMMAs in collaboration with authorities.* This activity has been finished, with LMMA boundary demarcation designated by the local people. The activity started with the community meeting, introduction of LMMA and collaborative management principles, and defining the boundaries with the agreements of surrounding villages. The verification of this boundary was implemented onsite at fishing grounds. ([Appendix. 6 Map of boundary demarcation of LMMA for 5 villages](#))
- *Activity 1.6 Support, with technical advice and data, the creation of LMMA action plans based on results of 1.4.* Based on the PRA results, the team has been implementing management planning for LMMAs in 5 villages, working to achieve the customary law consensus of local fishers. By assessing the root of problems in site location, the team has developed the activity and funding opportunity for developing the LMMA for a 5 year period to achieve the sustainability of LMMAs. So far 3 villages (Kuala Baru, Kuala Makmur, and Ujung Tinggi) have completed the management plan and customary law, and 2 of them (Sambay and Pulau Bengkalak) are still under revision. ([Appendix 7. Management Planning](#))
- *Activity 1.7 Train and support community members to undertake SMART patrol activities, including both independently-led and collaborative patrols* FFI has supported the community patrols in two LMMAs within PiSiSi MPA since 2011. With Darwin support, in 2019 FFI has expanded these efforts to five further LMMAs. So far, Kuala Baru, Kuala Makmur, Ujung Tinggi villages have carried out the patrols, while Pulau Bengkalak and Sambay are still conducting management planning. FFI has introduced 3 kinds of patrols to co-manage the LMMAs with the stakeholders, they are fisher-led voluntary patrols, routine patrols scheduled by the *Panglima Laot* and collaborative patrol where government staff participate alongside community stakeholders. So far, the voluntary patrol and routine patrol have been running inside LMMAs. To support the local fishers and *Panglima Laot* onsite, FFI has implemented community routine patrol training in order to enhance the local management capacity. ([Appendix 8. MoM of Routine Patrol Training](#)). The photos of training are shown in Figure 8.



Figure 8. Provision of patrol training by FFI for Panglima Laot and local fishers

Kuala Makmur, Ujung Tinggi and Kuala Baru started voluntary patrols in December 2019. Patrol data is collected by fishers and sent to FFI for upload to the SMART patrol database. *Panglima Laot* own the data and submit to Simeulue DKP in quarterly reporting. Based on the database, Kuala Baru conducted 668 trips, Ujung Tinggi 191 trips and Kuala Makmur 360 trips. When local fishers go to sea, they also monitor the condition of surrounding waters and report the necessary information in the standardised format. Thus, they are able to report fishing ground locations, threatened species sightings, fishing gears being deployed, and crucially detect violators operating illegally inside LMMAs.

According to customary law, there are several prohibited fishing gears inside LMMAs; potassium, spotlights, bombs, trawling, muro-ami, and fish trap (*Bubu*). Compressors are the most commonly detected violation. In Year-1, FFI received data on 75 offenders (equal to 0.06 incident / patrol) operating inside PiSiSi MPA and, in response, 4 kinds of action were

taken by the local fishers; observation, reprimand, expulsion and reporting (see [Appendix 9. Patrols Report Year-1](#)). The map of the violations' location is shown in Figure 9.

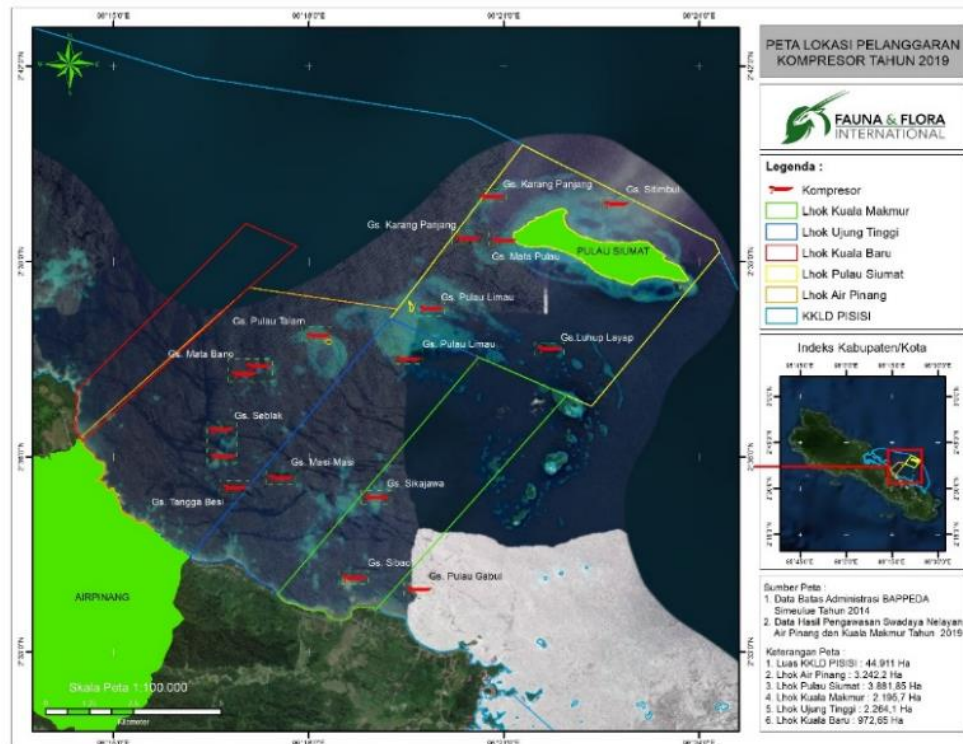


Figure 9. Map of compressor fishing violations (red markers) detected inside PiSiSi MPA by community patrols

In year-1, the *Panglima Laot* in Kuala Makmur, Ujung Tinggi and Kuala Baru have implemented one routine patrol inside PiSiSi MPA. The patrol was implemented on December 14 2019. One boat was found using compressor gear in Masi-Masi fishing ground. *The Panglima Laot* has reported this case to Simeulue DKP and the offender will be processed according to the Indonesian regulation, with investigations still underway. ([Appendix 10. Panglima Laot Crime Report for the Compressor Fishing](#))



Figure 10. Routine Patrol by Panglima Laot and subsequent reporting process

- **Activity 1.8 Facilitate the participation of government and enforcement agency personnel in LMMA co-management patrols which also involve communities.** The collaborative patrols are carried out by district government alongside local communities. The purpose of the patrols is to support the MPA and fisheries resources management in places prone to violations by compressor divers. The collaborative patrol did not detect any violators inside the MPA during the collaborative patrol that was implemented on November 27, 2019. ([Appendix 9. Patrols Report Year-1](#). & Figure 11).
- **Activity 1.9 Support, with facilitation and knowledge of good practice, committees to conduct and oversee LMMA management actions as defined in action plans.** This will start after finalizations of LMMA management plans. During the action-planning facilitation process FFI encourages the local peoples to develop the management planning for the LMMAs based on their village profiles obtained from the PRA process based on the scale of priority. In the future,

once implementing Activity 1.9, FFI will facilitates training according to identified need, likely including proposal funding, capacity building and technical assistance for *Panglima Laot* and village government in order to supports their LMMA management.



Figure 11. Patrol planning and implementation by local government and communities.

Output 2 Fishers, market actors and supporting organisations have improved understanding of the fisheries market system and collaborate to create equitable relationships within it.

Activity 2.1 Conduct market literacy training with selected participants from five communities. PMSD commenced with the preliminary survey of market actors. FFI assessed the basic information related to fisheries products, quality control, market access and enabling environment in the five target villages. The surveys were implemented between September 30 and October 13, 2019. PMSD initial surveys are shown in Figure 12.



Figure 12. Preliminary PMSD survey interviews with market actors

The surveys were implemented with involvement of 75 fishers (2 women) and 15 local fish collectors (traders). Most fishers targeted; grouper (*Serranidae*) species including coral trout (*Plectropomus leopardus*) & white-edged lyretail (*Variola albomarginata*); and octopus, primarily with traditional fishing gears. Fish sale prices ranged from Rupiah (Rp.). 130.000 /kg - 20.000 /kg while stated average income was Rp. 2.000.000 / month as a baseline. Most fishers said catches had declined compared with 10 years ago due to destructive fishing and adverse weather. Most fishers sell to a village collector; with most collected fish exported from Sinabang (Simeulue capital) to Medan and the Sumatran mainland. *Appendix 11. Market Literacy Report* & Figure 13.



Figure 13. Market visits and mapping in Medan city – North Sumatra

According to surveys in North Sumatra, most fish received from Simeulue is processed in a fish factory for high quality export. Any remainder is collected in local markets for consumption. FFI have identified the international fish exporter (Asian, American and European markets) in North Sumatra who receives the fish from Simeulue; TSI (Toba Surimi Industries) Ltd. A second company, Lautan Persada Ltd., export Simeulue fish products within Asia and domestically to other Indonesian markets such as Sumatera Utara, Riau, and Jambi. During the assessment, TSI and Lautan Persada manager expressed their willingness to train local fishers in Simeulue to improve fish catch quality and value. Once Covid-19 restrictions are lifted, FFI will facilitate this process and support local fishers in maintaining their product quality (see activity 2.4).

- **Activity 2.2 Conduct participatory market mapping & action planning workshops.** The market mapping has been implemented in Ujung Tinggi, Kuala Makmur, Kuala Baru and Sambay. However due to Covid-19 outbreak, the market mapping in Pulau Bengkalak is postponed. Subsequent action planning workshops have been implemented for 2 villages (Kuala Makmur and Ujung Tinggi) with the three other villages postponed due to Covid-19. In year 2 FFI will facilitate the implementation of the action-plans to improve market access. (*Appendix 12. Participatory market mapping & action planning workshop* & Figure 14).

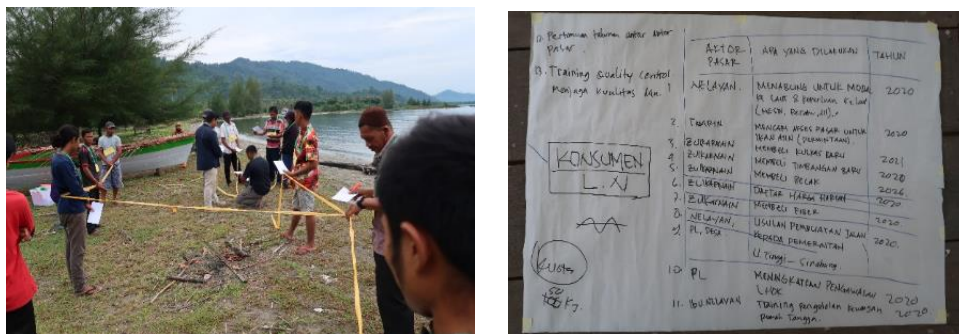


Figure 14. Market mapping and action-planning during village PMSD workshops

- **Activity 2.3 Organise and support exposure visits for fishers and traders to mainland seafood markets.** This was planned for March 2020, but this is delayed due to Covid-19 and will be implemented once restrictions are lifted.
- **Activity 2.4 Provide training in quality control, cold chain maintenance & financial management, and provide on-going mentoring to trainees.** This was planned for March 2020, but this is now delayed by Covid-19 and will be implemented once restrictions are lifted.
- **Activity 2.5 Hold quarterly monitoring meetings with market actors.** This activity will be implemented in Year 2.
- **Activity 2.6 Hold an annual progress evaluation workshop.** This activity will be implemented in Year 2.
- **Activity 2.7 Conduct an end of project participatory impact.** This activity will be implemented in Year 3.

Output 3: By 2022, coral reef fish biomass within the MPA has increased compared to 2018 baseline, with ecological data made accessible through the PiSiSi Atlas of Coastal Resources

- **Activity 3.1 Undertake coral reef fish assemblage surveys in new LMMA areas.** This survey was conducted in September 2019, with nine survey locations in project LMMAs which targeted coral reef ecosystems and factors associated with resilience parameters. The aims of this survey were to assess ecological conditions of coral reefs in the 5 LMMAs, generating data to support determining fisheries management and conservation in each LMMA. This will also provide baseline data in measuring LMMA management effectiveness. Based on the survey, hard coral cover in project LMMAs varies, from 8.5% to 60.78%. The highest hard coral cover was recorded in Pulau Bengkalak LMMA which is 60.78%, indicating “good” ecosystem health Kuala Baru and Sambay areas scored as the “medium” category, with 47.50% and 33.22% respectively. Coral coverage was rated “poor” in Ujung Tinggi of (11%) and Kuala Makmur (8.5%) (see Figure 15 for survey locations and Figure 16 for coral cover).

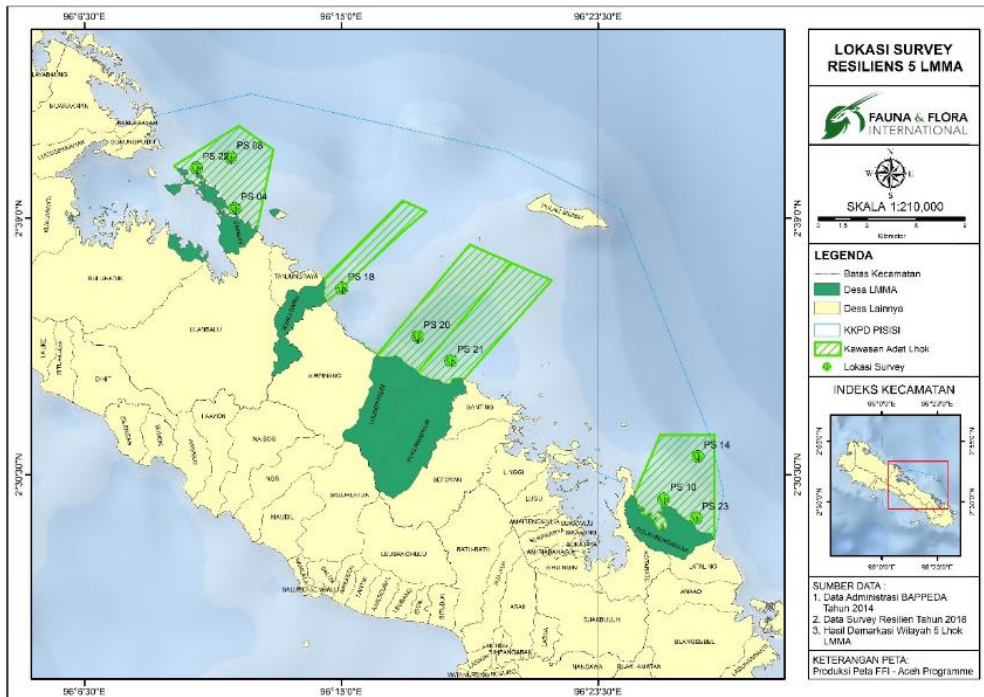


Figure 15. Map of coral reef survey locations (green markers) within LMMAs.

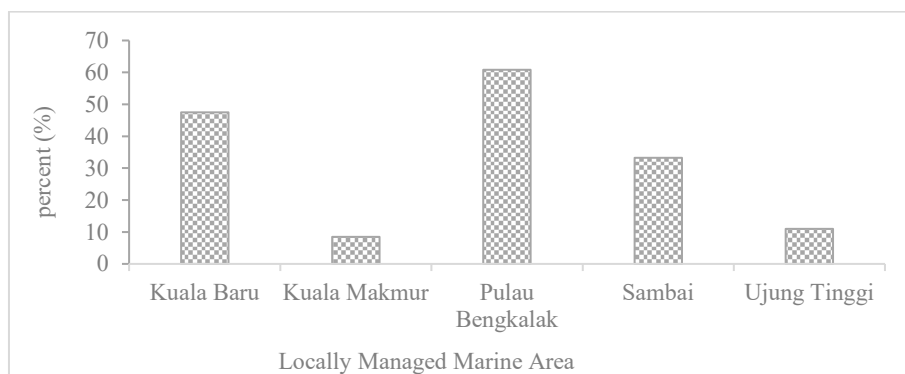


Figure 16. Percentage of hard coral cover inside project LMMAs

Abundance of reef fishes in each LMMAs was quantified at individuals per hectare (ind / ha). Fish abundance varied from 2,160 - 7,263 ind / ha. LMMAs Ujung Tinggi has the highest fish abundance of 7,263 ind / ha, while the lowest abundance of reef fishes are found in the LMMAs Kuala Makmur, with 2,160 ind / ha.

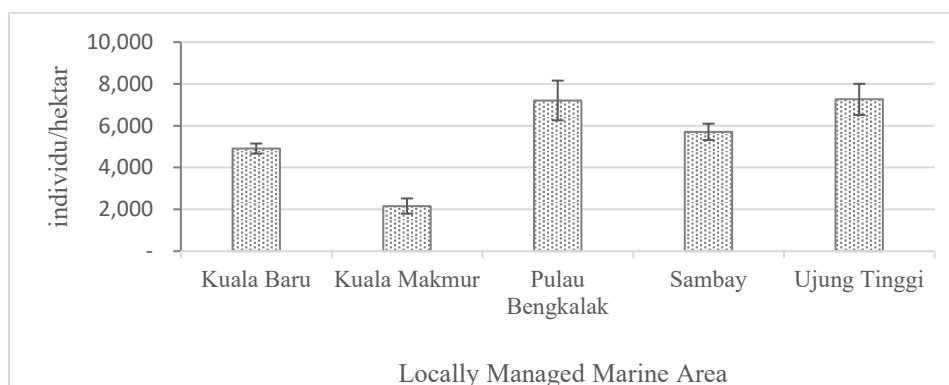


Figure 17. Fish abundance in project LMMAs

The final survey report is attached as [Appendix 13. Coral reef survey](#). In total 16 priority (ecological and economic indicator) reef fish families were recorded across the LMMAs, with Sambai showing the highest diversity, with 11 families, whilst LMMAs Kuala Baru, Kuala Makmur and Ujung Tinggi only recorded 6 reef fish families were found.

- *Activity 3.2 Undertake Spawning Aggregation (SPAG) surveys in new LMMA areas.* The SPAG survey in Year-1 was implemented over 10 months and ended on February 2020. The locations of SPAG survey were take place at Karang Panjang, Kumo-Kumo Dara, Pulau Limau and Pulau Talam fishing grounds within PiSiSi MPA. (Figure 18.)

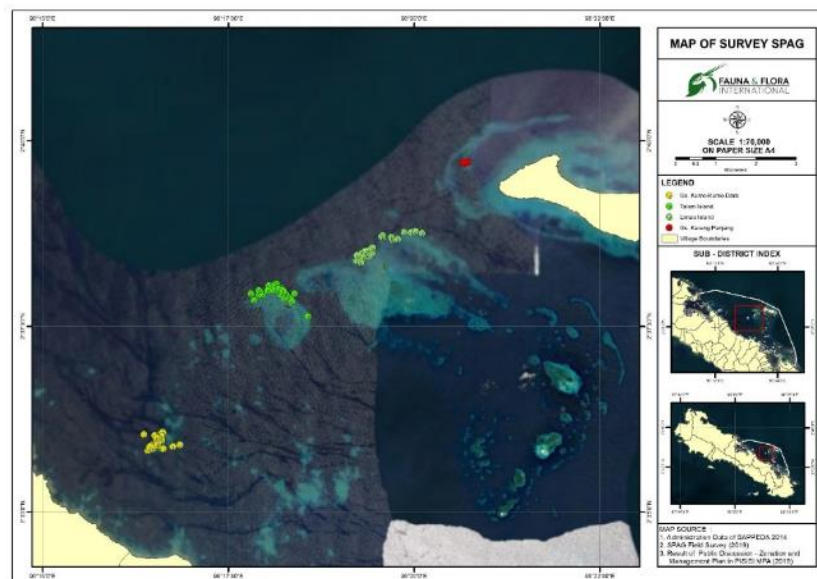


Figure 18. Map of SPAGs Survey locations (each of the four surveyed fishing grounds denoted by yellow, dark green, light green and red dots)

Based on the survey data, six spawning characteristics were recorded at the Pulau Talam location, with limited spawning activity and low fish abundance suggesting historic overfishing of these aggregations. The characteristics observed were; fighting, aggregation, spawning colouration, courtship and gravid spawning. Spawning of key fisheries target species, particularly *Serranidae*, was observed at very low levels. See [Appendix 14. SPAG Survey Report](#).

- *Activity 3.3 Disseminate the results of the reef fish and SPAG surveys with target communities and key stakeholders.* This activity will be implemented in Year-2
- *Activity 3.4 Upload (annually) data to the 'PiSiSi Atlas of Coastal Resources' online database.* This activity will be implemented in Year-2.
- *Activity 3.5 Present, train, and support use of the database with key resource governors and data users.* This activity will be implemented in Year-3.

Output 4 Marine resource governance actors in Simeulue and Aceh are empowered and motivated to co-manage LMMA and MPA networks in line with policy commitments

- *Activity 4.1 Undertake a preliminary analysis of resource governance stakeholders at district and provincial level.* Stakeholder analysis was started in June 2019, with project staff identifying key stakeholders and connecting them based on their roles and responsibility. Seventeen stakeholders were identified, and they will be engaged during the project implementation, see [Appendix 15. Stakeholders Analysis](#). We will ensure the relevant stakeholders are involved in order to strengthen cooperation between marine stakeholders. The strategy for stakeholder engagement consists of; preliminary visits / initial meetings, regular meetings, involvement in marine partnerships forum and taskforces. Initial stakeholder meetings during Year 1 are shown in Figure 13.



Figure 19. Meetings and forum discussion with

- **Activity 4.2 Secure district authority decree formalising the creation of the LMMA Networks Working Group on Simeulue.** On August 26, 2019 the DKP Aceh launched Focus Group Discussions (FGD) for the establishment of a MPA conservation partnership in Aceh. This activity aims to map LMMA stakeholders and partners who can support MPA decision-making at provincial level. FFI, as the partners of Aceh DKP, has encouraged establishment of this LMMA network in Simeulue. The reference to LMMA network formation is taken from district authority decree no 532/813/2019 about the formation of coastal community oversight groups in Simeulue ([Appendix 16. Simeulue Regent's Decree on LMMA Networks](#) Figure 21).



Figure 21. Focus Group Discussion for MPA Partnership

- **Activity 4.3 Facilitate initial meetings and arising activities for LMMA Networks Working Group.** On October, 9 2019, DKP Aceh and FFI initiated to establish the LMMA Network in Simeulue following the planning under Activity 4.2. The event was attended by 30 participants from *Panglima Laot* representing seven Simeulue villages. In addition, the Marine & Fisheries Agency, Navy and Police also supported this event and published the news ([Appendix 17. News Event of LMMA Networks](#)) as a mutual agreement (see Figure 22).



Figure 22. Initial Discussion for Establishment of LMMA Network in Simeulue

As the follow up from the initiation partnership strategy meeting in Simeulue, FFI encouraged the Aceh DKP to conduct initial meetings with 7 LMMA villages in PiSiSi MPA. As a result the *Panglima Laot*, heads of villages and Aceh DKP agreed to collaborate together for co-management of LMMAs inside PiSiSi MPA. ([Appendix 18 – Agreement between Marine and Fisheries Agency and Panglima Laot](#)).



Figure 23. Partnership formalisation between Panglima Laot and Aceh DKP

At this event, FFI distributed roles between DKP Aceh and *Panglima Laot* as part of LMMA networks. The scope of activities was also mapped in the initial agreement while waiting for the establishment of a dedicated provincial-level MPA management body. Funding was identified by the *Panglima Laot* as their greatest challenge, and FFI persuaded village heads to provide funding to *Panglima Laot* for LMMA management. At the end of discussion, the head of villages agreed to accommodate the village funding for the LMMA management. Through this event one village in PiSiSi MPA (Air Pinang) allocated funding to support the *Panglima Laot* activities, a key step which FFI will work to replicate in Darwin project villages.

- *Activity 4.4 Found the MPA management body and facilitate initial meeting and workplan creation with support from a provincial-level Governor's decree* On May, 2019 the Aceh DKP wrote an official letter to Aceh Governor for establishment of a provincial MPA management body, supported by FFI. The draft governor decree has also been created by Aceh DKP for approval. However, the final governor decree is still under review, and is expected by end of 2020. **(Appendix 19 Draft Governor Decree on MPA Management Body)**.
- *Activity 4.5. Secure commitment for at least one further LMMA programme to be rolled out in Aceh through activities of the MPA management body.* This activity will be implemented after establishment of MPA Management Body is approved by governor decree.
- *Activity 0.1 Monitor fisheries catch data through surveys of fish landing sites and fish traders in LMMA communities (outcome level monitoring activity).* The monitoring of catch data through surveys of fish landing sites will be implemented in year 2 with fish stock assessment survey; the survey will be implemented in Simeulue management areas including project LMMAs. So far FFI has selected partner staff from Unsyiah for implementing this activity. However due to Covid-19 this activity has to be postponed to Year 2. The data collection will be completed in year 3 and compiled together with ongoing data collection from fish traders, who receive catch from community fishers and record associated prices.

3.2 Progress towards project Outputs

- *Output 1. By 2022, five coastal communities are engaged in co-management of new LMMA areas within PiSiSi MPA* Currently, the project has implemented KAP surveys in order to socialize the LMMA concept and understand community attitudes. Based on the survey, modules are being prepared to improve local awareness and support compliance. In addition, preparations for co-management of 5 new LMMAs inside PiSiSi MPA have started. This began with formulation of LMMA management committees in each village, headed by Panglima Laot with representation of vulnerable groups (minimum of 15%). This was followed by profiling villages and their marine resources through Participatory Rural Appraisal (PRA), and then LMMA management planning. Going forward, FFI will facilitate training and capacity building for these newfound local institutions, so that by 2022 the five coastal communities will be effectively engaged in co-management of PiSiSi MPA.
- *Output 2. Fishers, market actors and supporting organisations have improved understanding of the fisheries market system and collaborate to create equitable relationships within it.* FFI firstly conducted market literacy programs for fishers, enabling market actors to understand their supply chains. In addition, market actors also took part in market mapping & action-planning workshops, thus involving them directly in understanding enabling factors for their market and how blockages might be addressed through action plans. With involvement of fishers, fish collectors, traders,

and relevant stakeholders, the next step is for FFI to facilitate action-plan implementation to improve market access. FFI will facilitate meetings between the market actors and supporting organisations to support the PMSD action plan implementation process. In addition, training will be provided according to specific capacity gaps identified. So far, quality control training is proposed as a priority by fishers, with involvement of the fish collectors / traders. FFI also will conduct the exposure visits between market chain locations which will connect actors and build relationships. With this ongoing planning and facilitation process, this approach will improve the market access through more equitable relationships, leading to higher quality products and improved local prices. FFI will maintain regular communication between market actors through quarterly meetings and annual evaluation workshops.

- *Output 3. By 2022, coral reef fish biomass within the MPA has increased compared to 2018 baseline, with ecological data made accessible through the PiSiSi Atlas of Coastal Resources*
FFI has conducted reef resilience survey in 5 LMMAs to establish the baseline of the repeat survey to be conducted at the same sites in the project's 3rd year, in order to assess progress towards the first part of the Output above. For accessing the PiSiSi Atlas database, FFI will input all survey data into a single database. This will commence in year-2 according to the workplan.
- *Output 4. Marine resource governance actors in Simeulue and Aceh are empowered and motivated to co-manage LMMA and MPA networks in line with policy commitments*
Currently, Aceh is still awaiting the establishment of the MPA management body that will be managing the MPAs in Aceh, as this requires a government decree. The MPA management body's establishment is a critical step, as it will create a dedicated organisation with the mandate to deliver MPA management in collaboration with fishing communities, in addition to working on issues such as tourism development, MPA financing and ecological monitoring. Whilst preparation of this body is still underway, FFI is building relationship between community-level managers through the LMMAs networks and has connected them with provincial decision-makers at the Aceh DKP. So far 7 Panglima Laot has signed an LMMA co-management agreement with Aceh DKP in PiSiSi MPA. These connections between communities and provincial authorities will enable the *Panglima Laot* to address concerns to authorities, receive government support for management activities, and access new LMMA financing streams. With the new agreement between the LMMA networks and the Aceh DKP, it's expected that upcoming local government programmes will have increased coastal community participation in order to maintain LMMA management. Furthermore, the *Panglima Laot* is expected to have support from provincial authorities for addressing law enforcement inside LMMAs. With these connections, Panglima Laot will have increased leverage to access village funding to support LMMA management, due to the clear definition of roles and responsibilities in the agreement between Panglima Laot and Aceh DKP.

3.3 Progress towards the project outcome

The outcome of the project is "By 2022, members of five coastal communities (1,200 people) and relevant stakeholders are empowered to sustainably co-manage PiSiSi MPAs with associated improvements in coral reef ecosystem health"

To achieve this progress we would like to address the adequate indicators for measuring the outcome as below here:

- *Indicator 0.1: The use of compressor fishing and other destructive fishing methods is reduced in PiSiSi MPA year on year throughout the project period, compared with 2017 baseline of 0.4 incidents detected per patrol.*

In year -1, the patrol has been operating inside PISISI MPA and there were 0.06 incidents detected per patrol recorded, based on FFI data.

- *Indicator 0.2 By 2022, there is at least 10% increase in income for fisher households in 5 LMMA communities (total 1,200 people, of whom 50% female) (milestone of 5% by end of year 2)*

In year-1, FFI has conducted the preliminary market literacy survey where the income of local fisher households from 5 LMMAs is at range of Rp. 2.000.000 / month (as the baseline). The evaluation of the local income will be implemented end of year-2.

- *Indicator 0.3 By 2022, at least 85% of target groups report improvements in locally defined non-monetary dimensions of well-being*

In year -2, FFI will facilitate annual meetings between market actors and fishers, and the assessment of non-monetary dimensions of welfare will be included on the agenda. Change will also be assessed in wider communities through comparison of KAP surveys to year 1 baselines.

- *Indicator 0.4 By 2022, c. 11,000ha of LMMAs is newly under organized co-management by communities and Government representatives (tentative target based on area of 5 existing LMMAs in PiSiSi; exact target will result from community consultations)*

In year -1, FFI has facilitated the boundary demarcation of LMMAs where each of the villages targeted owned their boundaries and commenced active co-management. However FFI needs to socialize the results of boundary demarcation in the *mukim* wider community, which will involve the neighborhood villages, head of group villages, and village government representatives.

- *Indicator 0.5 By 2022, fish biomass across the MPA increases relative to 2018 baseline including no decrease in abundance, variety or fish size. 2018 data under analysis; baseline to be finalised.*

In year -1, the fish biomass across the MPA is used for the baseline, in addition to 2018 data, and FFI will assess the improvement in 2022, with no decrease in abundance expected. At this time it is considered that indicators remain available and adequate for measuring the outcome, with each tracking a key component of PiSiSi MPA's sustainable management. Based on Year 1 experiences, it is expected that the overall outcome can be achieved, notwithstanding potential COVID impacts on project delivery which, whilst having little effect on year 1, are likely to significantly impact year 2.

3.4 Monitoring of assumptions

- *Outcome assumption 1: The observed decrease in compressor fishing in previously designated LMMAs, following an increase in community and government patrolling, is repeated in the five LMMAs included in this project.*

Comments: the patrols made in 5 new LMMAs by the local community and the government are still anticipated to decrease compressor fishing. This is based on continuing evidence from established LMMAs in PiSiSi where the surveillance of Panglima Laot and local government is effective in decreasing the numbers of compressor fishing practices. Given the recent establishment of the 5 project LMMAs, it is too soon to assess decreases in compressor fishing activity, but newly established patrols have already led to reporting and reprimanding of violators (see narrative on Activity 1.7).

- *Outcome assumption 2: The coral reef ecosystems of PiSiSi MPA are not affected by a mass mortality bleaching event, typhoon or other unforeseeable natural stressor.*

Comments: the ecosystems of PISISI MPA currently remain in normal condition, and significant natural stressors have not been observed during this reporting period.

- *Outcome assumption 3: Catch per unit effort for fishers does not decline significantly over project period due to external factors*

Comments: since the catch per unit of the local fishers remains stable without the external factors that might affected the fish catches.

- *Outcome assumption 4: Through this and other initiatives, 40-50% of communities dependent on MPA resources will be engaged in conservation activities through*

LMMAAs. We assume that the remaining 50% do not change from their existing behaviour so as to compromise the overall health of the MPA.

Comments: Based on previous experience and observations from the project so far, this assumption remains accurate in terms of the number of communities participating through this project and parallel work. However, the other 50% of communities are predicted not to change from their existing behaviour but also do not threaten the overall health of the MPA. Most illegal fishing offenders come from outside the MPA and predominantly from north Sumatra.

- *Output 2, assumption 1: Seafood traders/ companies appreciate that supporting responsible fishers to improve product quality will improve their own bottom line and are willing to increase unit purchase price accordingly.*

Comments: Based on the productive initial discussions with seafood traders (see Activity 2.1) FFI will continue to connect the market actors. The price per unit will increase accordingly following the quality of fish product and FFI will facilitate the quality control trainings for the local fishers where the seafood traders will be the resource person for the training sessions.

- *Output 2, assumption 2: Fishers are willing and able to put new knowledge gained through training and mentoring into practice.*

Comments: the assumption is accurate. Based on the market literacy assessment the local fishers are willing to learn more about how to maintain the quality of fish and follow the trainings provided to increase the product quality.

Note regarding monitoring of assumptions: The current COVID-19 outbreak challenges the assumptions underpinning this project. For example, social restrictions and economic losses may jeopardise community ability to participate in project activities such as patrols and meetings, and increased hardship may result in intensified fishing, including illegal methods. Export bans and fish price drops may also undermine the market-focused activities. Significant COVID impacts only occurred in the last month of this reporting period, and whilst there is anecdotal evidence of the above issues already occurring, it is too soon to state how the assumptions (and the wider project) will be affected beyond the initial activity delays highlighted in this report. COVID and its impacts will be closely monitored in the first quarter of Year 2.

3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation

The stated impact of the project is *“The coral reef ecosystems of PiSiSi MPA are resilient and support productive fisheries as a result of locally managed marine areas which protect marine biodiversity and yield benefits for coastal communities.”*

The project has support from the Aceh DKP for the designation of PiSiSi MPA which will be launched in 2020 by MMAF (*Appendix 16. Draft of Aceh MPA Designation*). The document gives a zonation of the MPA for ensuring the sustainability of marine resources through locally-driven marine management, providing a vital framework and references for the national government as the consideration of designation approval. Building on this designation FFI will facilitate the management plan of PiSiSi MPA for a 20-year strategy. This will include explicit measures to positively impact biodiversity and poverty alleviation, building on the achievements to be completed by the end of the Darwin project and linking this project to long-term change.

By working in PiSiSi, FFI is contributing to Aceh’s provincial level MPA network, demonstrating the biodiversity and livelihood benefits of co-management approaches in this area of Indonesia.

4. Contribution to the Global Goals for Sustainable Development (SDGs)

- *SDG 1: by promoting equitable access to economic and natural resources (1.4) and building resilience amongst poor coastal communities through strengthening sustainable livelihood*

strategies (1.5). Through implementing PMSD approach to the fishers in 5 villages at PiSiSi MPA, FFI is promoting the equitable access to economic resources to all of the market actors invited to be involved in the improvement process. Meanwhile, the equal access to natural resources inside LMMA has also been initiated by FFI with the development of LMMA management planning and customary law in the target villages. All of these efforts are to ensure sustainable livelihoods for local people to achieve community resilience.

- *SDG 5: by ensuring the roles, skills, knowledge, needs and rights of women as well as men are respected and harnessed in efforts to conserve biodiversity and contribute to human wellbeing*. FFI is developing community-based management in 5 target villages, ensuring the role, skill, knowledge and rights of women and men are accommodated in planning processes. FFI has obtained 15% representation of women and vulnerable groups in LMMAs committee. During PMSD implementation, 15 local women were involved in action-planning workshops.

- *SDG 8: by supporting entrepreneurship and more productive, resource-efficient market systems*. In implementing the PMSD, FFI also support the entrepreneurship of local people by conducting the meeting between market actors. In the future necessary trainings will be provided to market actors to improve the system and remove blocks to market access.

- *SDG 14: by strengthening conservation and sustainable management of coastal-marine resources and habitats (14.2) and supporting responsible artisanal fisheries (14.4)*. The project will also secure long-term protection of coastal and marine biodiversity and ecosystem services on which human wellbeing depends. FFI and Aceh DKP are supporting the conservation and sustainable management of coastal marine resources and habitat. Through proposing the PiSiSi MPA zonation plan to ministry level, FFI has initiated the protection of coastal marine and habitat resources. Where the zonation proposed consists of the core zone (no take zone) and utilization zone, FFI expects to achieve the improved wellbeing of local people.

5. Project support to the Conventions, Treaties or Agreements

The project is contributing to the Convention on Biological Diversity (CBD), specifically:

Article 8(a) by supporting the establishment of marine protected areas in order to preserve biodiversity: FFI is working with stakeholders to finalise zonation schemes necessary to operationalise PiSiSi MPA whilst also empowering local stakeholders to manage their traditional waters and marine biodiversity through 5 new LMMAs.

Article 8(c) in promoting management practices that conserve and enable sustainable use of biodiversity: FFI is promoting sustainable biodiversity management practices by connecting with diverse decision-makers, from village-level *Panglima Laot* to national ministerial bodies.

Article 8(e) by promoting development, in particular by improving community knowledge of fisheries markets and supply chains whilst identifying opportunities to add product value. The project has brought together market actors in new collaborations which will work to improve supply chain equitability and value in the upcoming two years of the project.

Article 10(c), by supporting customary use of marine resources by five communities with traditional rights to fishing grounds within the LMMAs. FFI's key local partner is the *Panglima Laot*, the historic traditional institution for local fisheries management in Aceh. The project LMMA and community support approach is specifically designed to support these traditional bodies, including reinvigorating them in villages where such institutions had become dormant.

Article 13 (b) is also supported by this project, through the information, education and communication resources produced under Output 1, 'Cooperate, as appropriate, with other States and international organizations in developing educational and public awareness programmes, with respect to conservation and sustainable use of biological diversity'.

It is anticipated that materials produced under Output 1 (currently in progress) will be applicable for use elsewhere in Simeulue and across Aceh's MPA network. The materials produced will be delivered to schools and fisher's communities in PISISI MPA in order to supporting the education and public awareness programs and it expected to be the samples to the others MPAs in Aceh for improving the community awareness.

6. Project support to poverty alleviation

The expected beneficiaries regarding poverty alleviation, are the local / traditional fishers located in Kuala Baru, Kuala Makmur, Ujung Tinggi, Pulau Bengkalak and Sambay. According to the Market Literacy Assessment, the number of beneficiaries is 314 people. Most of the local fishers have common problems such as: limited knowledge of maintaining the quality of fish catches; lack of capital, and operating with inadequate fishing gear.

Table 2. Beneficiaries of the project

Village*	Population (2016)	Households	Sex		Population density (people per km ²)	Number of fishers
			M	F		
Ujung Tinggi	491	111	251	229	31	35
Kuala Makmur	1203	307	658	655	65	56
Kuala Baru	670	116	288	296	72	60
P Bengkalak	459	116	226	206	46	49
Sambay	456	161	351	306	74	114
TOTAL	3279	811	1774	1692	288	314

Through the PMSD approach we expect to improve market access for local fishers by connecting them with collectors and traders. The necessary training related with the maintenance of quality / fish will also enable the collectors/traders to improve the quality of fish catches. We expect local fishers' income to increase in 5 targeted villages and we will re-assess the improvement yearly by conducting the annual progress evaluation workshop. It is too soon to assess achievements of PMSD approaches, but poverty alleviation achievements will be tracked in years 2 and 3. We anticipate a further long-term fisheries resources benefit to arise from FFI's work to reduce the catching and sale of undersized fish (often a result of compressor fishing).

FFI has assessed the market literacy assessment conducted in year-1, where from the market map, the quality control of fish catches of local people will be improved with the trainings provided by the traders. Through the implementation of market action-planning, the beneficiaries of this project will receive improvement on knowledge, skills, and personal security to maintain personal income with the constraints of climates and limited fishing gear.

7. Consideration of gender equality issues

The project has promoted the participation of women in activities through consideration of the barriers to participation in this context, identification of key roles played by women within local fisheries, and active facilitation. So far, women have been involved in village committees with representation of 20 % (15 women in total across 5 villages, 3 on each committee). This is meaningful progress towards equitable gender representation in this context. Moreover in implementing the KAP survey 168 women participated from a total of 334 respondents. In addition, women are also involved in PMSD action-planning workshops, with 15 women participating in the development process out of 81 participants across four villages. At household scale, women play an important role in financial management and fish processing before sale to collectors, and these roles are explicitly considered in project PMSD activities. In Sambay village there are 2 women fishers going to sea using the traditional boat.

8. Monitoring and evaluation

Project Outcome "By 2022, members of five coastal communities (1,200 people) and relevant stakeholders are empowered to sustainably co-manage PiSiSi MPA with associated improvements in coral reef ecosystem health". So far, FFI has facilitated the co-management process by empowering the local institution (Panglima Laot) to network with the DKP at provincial level. The local management plan has also been developed in order to strengthen the locally-managed marine areas inside PISISI MPA. In the field, patrols and surveillance have been operating with the involvement of local people as well as local government to tackle destructive fishing practices. We expect collaborative management between the Panglima Laot and local government to contribute to improved coral reef state, as mentioned in the project outcome.

No	Indicator	How to Measure
01	The use of compressor fishing and other destructive fishing methods is reduced in PiSiSi MPA year on year throughout the project period, compared with 2017 baseline of 0.4 incidents detected per patrol.	The reduction of the use of compressor fishing and other destructive fishing will be measured by collecting the patrols data. So far, we have voluntary, routine and collaborative patrols. All of the data is compiled by FFI and is used for measuring this indicator through yearly comparisons of detection rates for illegal and destructive fishing.
02	By 2022, there is at least 10% increase in income for fisher households in 5 LMMA communities (total 1,200 people, of whom 50% female) (milestone target of 5% by end of year 2)	The income of local populations was assessed in year-1 through initial PMSD data collection/workshops and fish price data from traders. These metrics will be tracked in the remaining project duration, and complemented with end of project Participatory Impact Assessment. In addition FFI will consult on this issue during annual meetings, to gather supplementary feedback and testimony.
03	By 2022, at least 85% of target groups report improvements in locally defined non-monetary dimensions of well-being	KAP survey data will be triangulated with end of project Participatory Impact Assessment, in addition to supplementary feedback and testimony gathered through annual meetings between market actors, local fishers and FFI.
04	By 2022, c. 11,000ha of LMMAs is newly under organized co-management by communities and Government representatives (tentative target based on area of 5 existing LMMAs in PiSiSi; exact target will result from community consultations)	The boundary demarcation of LMMAs has started in year-1, and the process will continue in year-2. By involving the communities, as well as prominent figures in the villages, the target of LMMAs will be achieved.
05	By 2022, fish biomass across the MPA increases relative to 2018 baseline including no decrease in abundance, variety or fish size (2018 data is currently under analysis; baseline to be finalised.	FFI will conduct the survey in year-3, to assess how the fish biomass across MPA increases compared with 2018 data as the baseline.

The M&E plan has not changed during this reporting period. So far, partners have conducted key M&E components alongside FFI, such as Unsyiah for coral reef surveys, Flona for KAP surveys, *Panglima Laot* for patrols and government bodies for MPA planning. All partners share the resulting information with FFI, and Unsyiah has shared their survey methods with the FFI team and DKP Aceh has shared their planning documents. Information is shared using social media groups, emails and meetings with the participating stakeholders, including communities.

9. Lessons learnt

Some activities such as the surveys, PRA, management planning and customary law of LMMAs, and other related activities, have worked well in the past year. The project had a challenge in implementing PMSD in Simeulue due to the lack of representation of the market actors at workshops. Consequently, FFI will repeat the event / messages once activities resume post-COVID-19 restrictions. This is a frequent challenge in Simeulue's remote areas and FFI will maintain formal communication with agency leaders in order to ensure appropriate participation.

The recommendation and learning is to announce the project aims to the regent of Simeulue and the head of the agency. Government officers will highlight the event / workshop properly by attending the event as per the schedule. In the future plan, FFI will try to address the issues to the regent of Simeulue through DKP Aceh with the expectation that all stakeholders will be involved in the process, improving cooperation across levels of authority.

10. Actions taken in response to previous reviews (if applicable)

N/A

11. Other comments on progress not covered elsewhere

N/A

12. Sustainability and legacy

On February 20, 2020 FFI has been involved in proposing the Aceh MPA designation to Marine and Fisheries Ministry Affair (MMAF) placed in Bandung – West Java. In this event, all of the documents related with the designation process of Aceh MPA, including the zonation plan of the no take zone and utilization zone, were evaluated by ministry level and FFI representing PiSiSi MPA. As a result, the ministry level accepted the proposal from the Aceh MPAs, including PiSiSi MPA. The designation process will be in 2020, as the final draft of the decree is being formulated. In year-2, FFI will continue supporting the local communities by developing a 20-year management plan for PISISI MPA, aligning with the government requirements for MPA management after designation process.



Figure 23. Evaluation of Aceh and Papua MPAs by MMAF

FFI Aceh Staff participated in the International Congress on Conservation Biology (ICCB) in Kuala Lumpur, 21 – 25 July 2019. The theme of presentation was the Customary Management of Marine Resources by the Panglima Laot in Simeulue Island, which included sharing work undertaken through this Darwin project.



Figure 20. FFI Aceh team presenting Darwin-funded work at ICCB international Conference 2019

Cooperation of FFI, DKP Aceh, and WWF Indonesia for MPA design training has also built knowledge within FFI to support the exit strategy of the project. When implementing PRA for traditional fishing grounds and facilitating LMMA committees, FFI has also assessed and facilitated an open discussion about institutional funding which might coming from the village government fund and DKP Aceh. As a result, most village heads have announced their willingness to support *Panglima Laot* for maintaining the LMMAs management to FFI. The positive results come from Air Pinang Village (funded by Arcadia) and Ujung Tinggi village (funded by Darwin) where support from village governments has included funding allocation to patrol activities, in addition to capacity building of *Panglima Laot* (**Appendix 20. Village Government Fund for LMMA Management**). The other Darwin-funded villages also committed and will follow this scheme accordingly. DKP Aceh will also support target villages with their annual programs, since the LMMAs networks is to support the local operation. This securing of

government co-finance is a critical step towards reducing dependency on NGO grants and a vital part of the longer term exit strategy for FFI, enabling government and community partners to increase independence and diversify their funding base.

13. Darwin identity

FFI Indonesia in Aceh has run the marine programme since 2011, funded by Arcadia for Air Pinang and Pulau Siumat villages. With the funding from Darwin (and continued Arcadia co-finance) we have begun the wider intervention, involving 5 more villages in PiSiSi MPA. The intervention of Air Pinang and Pulau Siumat being the guidelines for FFI to implement the same program approach in the 5 villages. Darwin is thus playing a critical role in the scaling up of co-management approaches at the site and is the leading funder for FFI's work in Simeulue.

14. Safeguarding

FFI's **Safeguarding Children and Adults at Risk Policy & Procedure** was developed in December 2014 and last updated in March 2018. The policy applies to Members of Council and its sub-committees, FFI employees, temporary staff provided through agencies, volunteers and interns, contractors, consultants, service providers and any third parties who carry out work on behalf of FFI, in partnership with FFI or in conjunction with FFI. The policy demonstrates the organisation's commitment to safeguarding children and adults at risk and to complying with the United Nations Convention on the Rights of the Child; confirms the arrangements and procedures in place to safeguard children and adults at risk, including FFI's code of conduct; and provides clear guidance on how to raise, and how FFI responds to, concerns and allegations regarding the maltreatment of children and adults at risk. The policy expressly states that FFI does not tolerate sexual exploitation and abuse of any kind. Within this project, Flona implemented activities in schools with FFI support and were briefed by FFI on appropriate procedures and safeguarding. The facilitators used focus groups to ask questions and receive feedback and avoid any risks potentially associated with one-to-one student surveys. In addition, facilitators also explained to the teachers about survey aims and followed the guidelines included within the survey form. These steps were all conducted to avoid risks to children and adults.

FFI's **Anti-bullying and Anti-harassment Policy** was developed in March 2018. The policy applies to Members of Council and its sub-committees, FFI employees, temporary staff provided through agencies, volunteers and interns, contractors, consultants and any other third parties who carry out work on FFI's behalf. The stated purpose of the policy is to ensure a safe, welcoming and inclusive working environment, which is free from intimidation, threats, discrimination, bullying or harassment; to communicate clearly FFI's zero-tolerance of any form of bullying or harassment; to define the terms 'bullying' and 'harassment' and provide examples, so that there is a clear understanding of the types of conduct that are prohibited; to communicate the importance of reporting incidents of bullying and harassment; and to communicate the procedures in place to manage incidents of bullying and harassment. The policy expressly states that bullying or harassment of any kind against a person or group of people, whether persistent or an isolated incident, will not be tolerated under any circumstances. FFI's Aceh team worked with consultants in implementing LMMA consultation and management planning, and both FFI field staff and consultants were informed about how to maintain these organisational standards as a priority. The Aceh marine project leader is certified by Humanitarian Accountability Partnership (HAP) standard, and has overseen and advised facilitators on prevention of bullying and harassment incidents or any related issues.

FFI's **Whistleblowing Policy** was developed in June 2013 and last updated in December 2019. The policy applies to FFI employees. The stated purpose of the policy is to encourage employees to report suspected wrongdoing in the organisation as soon as possible, in the knowledge that their concerns will be taken seriously and investigated as appropriate, and that their confidentiality will be respected. It provides guidance on how to raise those concerns and aims to reassure employees that they can raise genuine concerns in good faith without fear of reprisals, even if they turn out to be mistaken. Aceh marine staff maintain clear and transparent

communication with FFI finance and administration teams in Aceh and Jakarta, to monitor for and avoid any potential wrongdoing and to enable prompt whistleblowing if needed.

FFI's partner due diligence procedures include checking whether any safeguarding concerns have arisen with the partner concerned and the Safeguarding Children and Adults at Risk Policy & Procedure forms part of contracts and agreements with third party contractors and sub-grantees. We are also currently researching LMS platforms (Learning Management Systems) which would enable online training in policies & procedures. We monitor updates on Government and Charity Commission guidance and review our policies and procedures accordingly.

In terms of **social safeguards**, FFI has publically available position papers on our [Livelihoods & Governance page](#), covering our approaches to **Free, Prior and Informed Consent, Gender in Conservation, and Displacement and Restrictions on Access to Resources and Conservation** Our specialist Conservation, Livelihoods and Governance team support regional FFI staff and partners to take a holistic, people-centred approach to biodiversity conservation, and to ensure all project activity is strongly aligned with these principles.

No safeguarding issues have been reported during the reporting year for this project.

15. Project expenditure

Table 3: Project expenditure during the reporting period (1 April 2019 – 31 March 2020)

Project spend (indicative) since last annual report	2019/20 Grant (£)	2019/20 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
TOTAL				

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2019-2020

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
<p>Impact</p> <p>The coral reef ecosystems of PiSiSi MPA are resilient and support productive fisheries as a result of locally managed marine areas which protect marine biodiversity and yield benefits for coastal communities.</p>		<p>The management framework required for this impact has been established with 5 communities newly engaged in LMMA establishment and management, whilst also undertaking steps to improve their fisheries livelihoods through PMSD. Baselines to track coral reef ecosystem state have been created, which will provide evidence of impact through comparisons in year 3. These are underpinned by improved connections to governance systems and related Indonesian authorities.</p>	
<p>Outcome</p> <p>By 2022, members of five coastal community (1,200 people) and relevant stakeholders are empowered to sustainably co-manage PiSiSi MPAs with associated improvements in coral reef ecosystem health</p>	<ul style="list-style-type: none"> • The use of compressor fishing and other destructive fishing methods is reduced in PiSiSi MPA year on year throughout the project period, compared with 2017 baseline of 0.4 incidents detected per patrol. • By 2022, there is at least 10% increase in income for fisher households in 5 LMMA communities (total 1,200 people, of whom 50% female) (milestone target of 5% by end of year 2) • By 2022, at least 85% of target groups report improvements in locally defined non-monetary dimensions of well-being • By 2022, c. 11,000ha of LMMAs is newly under organised co-management by communities and government Representatives (tentative target based on area of 5 existing LMMAs in PiSiSi; exact 	<ul style="list-style-type: none"> • In Year-1, the violators still operate inside PISISI MPA but the rate has reduced to 0.06 incidents detected per patrol (a total of 75) (<i>December 2019 – March 2020</i>). • In Year-1, the market literacy has assessed the baseline of the fisher's income in average Rp. 100.000 / trip. This will be compared at the end of Year-2 for expectation of 10 % increase. • KAP survey baseline established and targeted community outreach planned in response • In year -1. FFI has facilitated the LMMAs formation in 5 villages where the co-management process of these LMMAs still underway. • In year – 1, FFI has conducted the resilience survey with the 	<ul style="list-style-type: none"> • Continued implementation of patrols for voluntary, routine, and collaborative • Finishing market mapping and action planning; implementing action plans. • Implementing stakeholder meetings and annual workshop to track and support PMSD progress. • Work with new LMMA committees to carry out LMMA management and customary law for socialization and legalisation. • Continue reef data analysis and dissemination to stakeholders.

	<p>target will result from community consultations)</p> <ul style="list-style-type: none"> • Y 2022, fish biomass across the MPA increases relative to 2018 baseline including no decrease in abundance, variety or fish size (2018 data is currently under analysis; baseline to be finalised before project starts. 	<p>abundance of fish of 5 LMMAs varies from 2,160 - 7,263 ind / ha, and data analysis ongoing. We expect no decrease in abundance at the Year -3.</p>	
<p>Output 1. By 2022, five coastal communities are engaged in co-management of new LMMA areas within PiSiSi MPA</p>	<p>1.1 Knowledge, Attitudes and Practices (KAP) related to LMMAs show positive change at 5 new LMMA sites by Year 3, with at least 85% of respondents showing an improvement from Year 1 baseline. Target for surveys is 10% of population in target villages (total population 4178), therefore 418 people, 50% men and 50% women)</p> <p>1.2 By the end of year one, five community-based management committees are formed including 15% representation from women/ poorest households, from a baseline of 0.</p> <p>1.3 LMMA designation and zonation action plans, including patrolling, are created in five target communities by mid-point of Year 2 based on Participatory Rural Appraisal (PRA).</p> <p>1.4 Five LMMAs are approved by target communities and designated in collaboration with district fisheries authorities by end of Year 2</p> <p>1.5 Patrol and monitoring activities in five new LMMAs reach the following targets by project end from baseline of zero:</p> <p>a) 100% of community reports shared with government officials</p>	<p>1.1 The KAP Survey has been completed. See section 3.2 of the report and Appendix 2.</p> <p>1.2 The villages committee already formed in 5 villages including the 15 % representation of women/ poorest. See section 3.2 of the report and Appendix 3</p> <p>1.3 The LMMA designation and zonation action-plan already finished for 3 villages and going to finish for remaining of 2 villages at year-2. See section 3.2 and Appendix 6.</p> <p>1.4 3 LMMAs already approved by target communities and designation of the 5 management planning will be conducted with socialization process which will involve district representatives in Year-2.</p> <p>1.5 a) The quarterly report of community led patrol has been submitted to Simeulue Marine and Fisheries Agency. (On-going for input data)</p> <p>b) In Year 1, 3 routine patrols have been implemented in PISISI MPA. See section 3.2 of the report and Appendix 14.</p> <p>c) In year 1, 2 collaborative patrols have been implemented in PISISI MPA. See section 3.2 of the report and Appendix 14.</p>	

	<p>b) Routine patrols take place in each LMMA with 10 patrols per year by Year 3.</p> <p>c) Collaborative patrols involving government & enforcement personnel take place in PiSiSi MPA 3 times/ year by Year 3.</p>		
<p>Activity.</p> <p>1.1 Conduct Knowledge, Attitudes and Practices (KAP) surveys in target communities at project start and end</p> <p>1.2 Deliver training and outreach in five target communities to socialise LMMA concept</p> <p>1.3 Support the formation of LMMA management committees headed by Panglima Laot representatives</p> <p>1.4 Conduct Participatory Rural Appraisal (PRA) of traditional fishing areas, priority habitats and other factors influencing LMMA zonation and designation</p> <p>1.5 Support formal designation of LMMAs in collaboration with authorities</p> <p>1.6 Support, with technical advice and data, the creation of LMMA action plans based on results of 1.4</p> <p>1.7 Train and support community members to undertake SMART patrol activities, including both independently-led and collaborative patrols</p> <p>1.8 Facilitate the participation of government and enforcement agency personnel in LMMA co-management patrols which also involve communities</p> <p>1.9 Support, with facilitation and knowledge of good practice, committees to conduct and oversee LMMA management actions as defined in action plans</p>		<p>1.1 Survey conducted, report completed.</p> <p>1.2 On-going</p> <p>1.3 Committees formed, report completed</p> <p>1.4 PRA conducted and report completed</p> <p>1.5 Report (Map) completed</p> <p>1.6 Process completed for 3 villages</p> <p>1.7 On going</p> <p>1.8 Report completed and government participation underway.</p> <p>1.9 Implement in Year-2</p>	<p>In the next period, the activities will be continue for implementing training for target communities and supporting them to conduct and oversee LMMA management actions as defined in action plans.</p>
<p>Output 2.</p> <p>Fishers, market actors and supporting organisations have improved understanding of the fisheries market system and collaborate to create equitable relationships within it.</p>	<p>2.1 Members of 5 LMMA fisher households trained in market literacy (at least 25% women) by end Year 1 (gender representation is determined due to the assessed need for different aspects of market literacy training according to male and female roles within market systems)</p>	<p>2.1 The market literacy report finished. See section 3.2 and Appendix 8</p> <p>2.2 The market map report finished for 4 villages and the action planning report finished for 3 villages. See section 3.3 and Appendix 9</p> <p>2.3 This will be continuing for year – 2 due to Covid-19</p> <p>2.4 This will be reported in Years – 2 & 3</p>	

	<p>2.2 Fishers, seafood traders, SMEs, processor/export companies and supporting agencies participate in fisheries market mapping and action planning (at least 10% women) by end Year 1 (gender representation is determined due to the assessed male and female roles within market systems)</p> <p>2.3 At least 50% of LMMA fishers and traders receive training and on-going mentoring in quality control, cold chain maintenance and financial management, by project end, from a baseline of 0.</p> <p>2.4 % of female and male participants who demonstrate improved market literacy and relationships (50% end of Year 2; 75% end of Year 3).</p>		
<p>Activity.</p> <p>2.1 Conduct market literacy training with selected participants from five communities</p> <p>2.2 Conduct participatory market mapping & action planning workshops</p> <p>2.3 Organise and support exposure visits for fishers and traders to mainland seafood markets</p> <p>2.4 Provide training in quality control, cold chain maintenance & financial management, and provide on-going mentoring to trainees</p> <p>2.5 Hold quarterly monitoring meetings with market actors</p> <p>2.6 Hold an annual progress evaluation workshop</p> <p>2.7 Conduct an end of project participatory impact assessment</p>		<p>2.1 Training conducted and report completed.</p> <p>2.2 Training conducted in 4 out of 5 villages and report completed.</p> <p>2.3 Will be implemented in Y2</p> <p>2.4 Will be implemented in Y2</p> <p>2.5 Will be implemented in Y2</p> <p>2.6 Will be implemented in Y2</p> <p>2.7 Will be implemented in Y3</p>	<p>In the next intervention, FFI will implement market mapping and action planning for the remaining villages, conduct exposure visits for market actors and train the market actors with quality control and other supply chain improvement measures.</p>
<p>Output 3.</p> <p>By 2022, coral reef fish biomass within the MPA has increased compared to 2018 baseline, with ecological data made accessible through the PiSiSi Atlas of Coastal Resources</p>	<p>3.1 By end of project, herbivorous and fisheries target species biomass (reef fish species) increases by at least 10% within the MPA compared to 2018 FFI baseline (2018 data is currently under</p>	<p>3.1 Year 1 surveys completed and baselines established, repeat survey to be implemented in Year - 3</p> <p>3.2 Year 1 surveys completed and baselines established, repeat survey to be implemented in Year – 3. Will be implemented in Year - 3</p>	

	<p>analysis; baseline to be finalised before project starts)</p> <p>3.2 Observed numbers of IUCN Red listed species in the MPA, including at least leopard and Malabar grouper, are maintained throughout the project period</p> <p>3.3 Observed abundance of grouper spawning aggregations (SPAGs) shows a minimum increase of 10% by end of project period</p> <p>3.4. Ecological monitoring data collected under this output are available to stakeholders through the 'PiSiSi Atlas of Coastal Resources' online database, updated annually</p>	<p>3.3 Year 1 SPAG surveys and report completed. See section 3.2 and Appendix 11</p> <p>3.4 This will be executed in Year-2.</p>
<p>Activity.</p> <p>3.1 Undertake coral reef fish assemblage surveys in new LMMA areas.</p> <p>3.2 Undertake Spawning Aggregation (SPAG) surveys in new LMMA areas</p> <p>3.3 Disseminate the results of the reef fish and SPAG surveys with target communities and key stakeholders.</p> <p>3.4 Upload (annually) data to the 'PiSiSi Atlas of Coastal Resources' online database</p> <p>3.5 Present, train, and support use of the database with key resource governors and data users</p>	<p>3.1 Surveys and report completed for Year 1</p> <p>3.2 Surveys and report completed for Year 1</p> <p>3.3 Will be implemented in Y2</p> <p>3.4 Will be implemented in Y2</p> <p>3.5 Will be implemented in Y2</p>	<p>In the next intervention, FFI will initiate the data integration system by using SMART database and introduce the system to the local stakeholder as PISISI Database which will accommodate the ecological data and disseminate it to decision-makers. Data analysis will also continue in year 2 alongside preparation for the repeat ecological surveys in year 3.</p>
<p>Output 4.</p> <p>Marine resource governance actors in Simeulue and Aceh are empowered and motivated to co-manage LMMA and</p>	<p>4.1 Marine resource management stakeholders at provincial and district levels are analysed and mapped by end of Year 1</p>	<p>4.1 Stakeholder analysis conducted and report completed. See section 3.2 and Appendix 11</p> <p>4.2 DKP approved formation of LMMA Networks Working Group. See section 3.2 and Appendix 14</p> <p>4.3 This will be executed in Year-2.</p>

<p>MPA networks in line with policy commitments</p>	<p>4.2 District Fisheries Authority (DKP) approves formation of LMMA Networks Working Group by Q1 of Year 2</p> <p>4.3 An LMMA Networks Working Group has been established on Simeulue Island under a Governor's Decree by middle of year 2, and is active by end of year 2</p> <p>4.4 Province-level MPA management body founded through initial meeting by end of Year 2</p> <p>4.5 MPA management body instigates at least one further LMMA network within Aceh province by project end</p>	<p>4.4 This will be executed in Year-2. 4.5 This will be executed in Year-3.</p>
<p>Activity.</p> <p>4.1 Undertake a preliminary analysis of resource governance stakeholders at district and provincial level</p> <p>4.2 Secure district authority decree formalising the creation of the LMMA Networks Working Group on Simeulue</p> <p>4.3 Facilitate initial meetings and arising activities for LMMA Networks Working Group</p> <p>4.4 Found the MPA management body and facilitate initial meeting and workplan creation with support from a provincial-level Governor's decree</p> <p>4.5 Secure commitment for at least one further LMMA programme to be rolled out in Aceh through activities of the MPA management body</p>	<p>4.1 Stakeholder analysis completed and reported.</p> <p>4.2 LMMA Networks group established.</p> <p>4.3 Meeting held and report completed</p> <p>4.4 Will be implemented in Y2</p> <p>4.5 Will be implemented in Y2</p>	<p>In the next intervention, FFI will continue to facilitate co-management through LMMA networks meetings and connecting government authorities with communities and traditional fisheries managers. In addition, once the MPA management body is established (pending government approval) the LMMA networks will be connected with this management unit, with FFI continuing to support decision-making and co-management actions.</p>

Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Impact: The coral reef ecosystems of PiSiSi MPA are resilient and support productive fisheries as a result of locally managed marine areas which protect marine biodiversity and yield benefits for coastal communities</p>			
<p>Outcome:</p> <p>By 2022, members of five coastal community (1,200 people) and relevant stakeholders are empowered to sustainably co-manage PiSiSi MPAs with associated improvements in coral reef ecosystem health</p>	<ul style="list-style-type: none"> The use of compressor fishing and other destructive fishing methods is reduced in PiSiSi MPA year on year throughout the project period, compared with 2017 baseline of 0.4 incidents detected per patrol. By 2022, there is at least 10% increase in income for fisher households in 5 LMMA communities (total 1,200 people, of whom 50% female) (milestone target of 5% by end of year 2) By 2022, at least 85% of target groups report improvements in locally defined non-monetary dimensions of well-being By 2022, c. 11,000ha of LMMAs is newly under organised co-management by communities and government Representatives (tentative target based on area of 5 existing LMMAs in PiSiSi; exact target will result from community consultations) Y 2022, fish biomass across the MPA increases relative to 2018 baseline including no decrease in abundance, variety or fish size (2018 data is currently under analysis; baseline to be finalised before project starts) 	<ul style="list-style-type: none"> 0.1. Annual SMART patrol reports produced for 2019, 2020, and 2021 0.2. 6-monthly fisheries catch surveys and fish trader financial record collection from 2019-2022. End of project participatory impact assessment in 2022 0.3 End of project participatory impact assessment and KAP surveys 0.4. MPA & LMMA Networks annual plan for 2019, 2020, and 2021 0.5. Ecological survey results 	<p>The observed decrease in compressor fishing in previously designated LMMAs, following an increase in community and government patrolling, is repeated in the five LMMAs included in this project.</p> <p>The coral reef ecosystems of PiSiSi MPA are not affected by a mass mortality bleaching event, typhoon or other unforeseeable natural stressor.</p> <p>Catch per unit effort for fishers does not decline significantly over project period due to external factors</p> <p>Through this and other initiatives, 40-50% of communities dependent on MPA resources will be engaged in conservation activities through LMMAs. We assume that the remaining 50% do not change from their existing behaviour so as to compromise the overall health of the MPA.</p>
<p>Output 1</p> <p>By 2022, five coastal communities are engaged in co-management of new LMMA areas within PiSiSi MPA</p>	<p>1.1 Knowledge, Attitudes and Practices (KAP) related to LMMAs show positive change at 5 new LMMA sites by Year 3, with at least 85% of respondents showing an improvement from Year 1 baseline.</p>	<p>1.1. KAP surveys delivered and reports produced in 2019 and 2022.</p> <p>1.2. Community committee structure, determined based-on gender representative selection criteria,</p>	

	<p>Target for surveys is 10% of population in target villages (total population 4178), therefore 418 people, 50% men and 50% women)</p> <p>1.2 By the end of year one, five community-based management committees are formed including 15% representation from women/poorest households, from a baseline of 0.</p> <p>1.3 LMMA designation and zonation action plans, including patrolling, are created in five target communities by mid-point of Year 2 based on Participatory Rural Appraisal (PRA).</p> <p>1.4 Five LMMAs are approved by target communities and designated in collaboration with district fisheries authorities by end of Year 2</p> <p>1.5 Patrol and monitoring activities in five new LMMAs reach the following targets by project end from baseline of zero:</p> <ol style="list-style-type: none"> 100% of community reports shared with government officials Routine patrols take place in each LMMA with 10 patrols per year by Year 3. Collaborative patrols involving government & enforcement personnel take place in PiSiSi MPA 3 times/ year by Year 3 	<p>confirmed by end of Year 1.</p> <p>1.3. Community action plans documented by mid-point of Year 2, including the following components:</p> <ul style="list-style-type: none"> • LMMA management plan documents, demarcation maps. • Panglima Laot and community member training schedule • Patrol reporting schedule • Socio-economic and biological monitoring schedule <p>1.4. Five LMMA designations finalised and documented. 1.5. Patrol activity records and periodic reports</p> <p>1.5. Patrol activity records and periodic reports</p>	
<p>Output 2</p> <p>Fishers, market actors and supporting organisations have improved understanding of the fisheries market system and collaborate to create equitable relationships within it.</p>	<p>2.1 Members of 5 LMMA fisher households trained in market literacy (at least 25% women) by end Year 1 (gender representation is determined due to the assessed need for different aspects of market literacy training according to male and female roles within market systems)</p> <p>2.2 Fishers, seafood traders, SMEs, processor/export companies and</p>	<p>2.1 Sex-disaggregated participants lists; training workshop and exposure visit reports</p> <p>2.2 Sex-disaggregated participant lists, market maps and action plans</p> <p>2.3 Records of training, quarterly monitoring meetings and discussions with companies, fishers and traders; field</p>	<p>seafood traders/ companies appreciate that supporting responsible fishers to improve product quality will improve their own bottom line and are willing to increase unit purchase price accordingly.</p> <p>Fishers are willing and able to put new knowledge gained through training and mentoring into practice.</p>

	<p>supporting agencies participate in fisheries market mapping and action planning (at least 10% women) by end Year 1 (gender representation is determined due to the assessed male and female roles within market systems)</p> <p>2.3 At least 50% of LMMA fishers and traders receive training and on-going mentoring in quality control, cold chain maintenance and financial management, by project end, from a baseline of 0.</p> <p>2.4 % of female and male participants who demonstrate improved market literacy and relationships (50% end of Year 2; 75% end of Year 3)</p>	<p>observation notes of changes in practice</p> <p>2.4 Annual progress evaluation meetings. End of project gendered Participatory Impact Assessment</p>	
<p>Output 3</p> <p>By 2022, coral reef fish biomass within the MPA has increased compared to 2018 baseline, with ecological data made accessible through the PiSiSi Atlas of Coastal Resources</p>	<p>3.1 By end of project, herbivorous and fisheries target species biomass (reef fish species) increases by at least 10% within the MPA compared to 2018 FFI baseline (2018 data is currently under analysis; baseline to be finalised before project starts)</p> <p>3.2 Observed numbers of IUCN Red listed species in the MPA, including at least leopard and Malabar grouper, are maintained throughout the project period</p> <p>3.3 Observed abundance of grouper spawning aggregations (SPAGs) shows a minimum increase of 10% by end of project period</p> <p>3.4. Ecological monitoring data collected under this output are available to stakeholders through the 'PiSiSi Atlas of Coastal Resources' online database, updated annually</p>	<p>3.1. Coral reef fish assemblage surveys (underwater visual census) conducted in Year 1 and Year 3</p> <p>3.2. Encounter rates with priority grouper species recorded during annual coral reef fish surveys (see 3.1)</p> <p>3.3 Spawning aggregation (SPAG) surveys conducted in Year 1 and Year 3</p> <p>3.4 The 'PiSiSi Atlas of Coastal Resources' inventory is online by end of Year 2, updated by end of Year 3</p>	

<p>Output 4</p> <p>Marine resource governance actors in Simeulue and Aceh are empowered and motivated to co-manage LMMA and MPA networks in line with policy commitments</p>	<p>4.1 Marine resource management stakeholders at provincial and district levels are analysed and mapped by end of Year 1</p> <p>4.2 District Fisheries Authority (DKP) approves formation of LMMA Networks Working Group by Q1 of Year 2</p> <p>4.3 An LMMA Networks Working Group has been established on Simeulue Island under a Governor's Decree by middle of year 2, and is active by end of year 2</p> <p>4.4 Province-level MPA management body founded through initial meeting by end of Year 2</p> <p>4.5 MPA management body instigates at least one further LMMA network within Aceh province by project end</p>	<p>4.1. Stakeholder analysis Report</p> <p>4.2 District fisheries authority decree, formalising the requirement for co-management of LMMAs in Simeulue through the LMMA Networks Working Group</p> <p>4.3 Working Group establishment documentation, meeting minutes, attendance records and records of actions arising from meetings</p> <p>4.4 Governor decree authorising MPA management body. Minutes and action points from initial meeting</p> <p>4.5 Documentation of management body actions, meeting records with partner communities for new LMMA network</p>	
<p>Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p>			
<p>1.1 Conduct Knowledge, Attitudes and Practices (KAP) surveys in target communities at project start and end</p> <p>1.2 Deliver training and outreach in five target communities to socialise LMMA concept</p> <p>1.3 Support the formation of LMMA management committees headed by Panglima Laot representatives</p> <p>1.4 Conduct Participatory Rural Appraisal (PRA) of traditional fishing areas, priority habitats and other factors influencing LMMA zonation and designation</p> <p>1.5 Support formal designation of LMMAs in collaboration with authorities</p> <p>1.6 Support, with technical advice and data, the creation of LMMA action plans based on results of 1.4</p> <p>1.7 Train and support community members to undertake SMART patrol activities, including both independently-led and collaborative patrols</p> <p>1.8 Facilitate the participation of government and enforcement agency personnel in LMMA co-management patrols which also involve communities</p> <p>1.9 Support, with facilitation and knowledge of good practice, committees to conduct and oversee LMMA management actions as defined in action plans</p> <p>2.1 Conduct market literacy training with selected participants from five communities</p> <p>2.2 Conduct participatory market mapping & action planning workshops</p> <p>2.3 Organise and support exposure visits for fishers and traders to mainland seafood markets</p> <p>2.4 Provide training in quality control, cold chain maintenance & financial management, and provide on-going mentoring to trainees</p>			

2.5 Hold quarterly monitoring meetings with market actors

2.6 Hold an annual progress evaluation workshop

2.7 Conduct an end of project participatory impact assessment

3.1 Undertake coral reef fish assemblage surveys in new LMMA areas.

3.2 Undertake Spawning Aggregation (SPAG) surveys in new LMMA areas

3.3 Disseminate the results of the reef fish and SPAG surveys with target communities and key stakeholders.

3.4 Upload (annually) data to the 'PiSiSi Atlas of Coastal Resources' online database

3.5 Present, train, and support use of the database with key resource governors and data users

4.1 Undertake a preliminary analysis of resource governance stakeholders at district and provincial level

4.2 Secure district authority decree formalising the creation of the LMMA Networks Working Group on Simeulue

4.3 Facilitate initial meetings and arising activities for LMMA Networks Working Group

4.4 Found the MPA management body and facilitate initial meeting and workplan creation with support from a provincial-level Governor's decree

4.5 Secure commitment for at least one further LMMA programme to be rolled out in Aceh through activities of the MPA management body

Annex 3: Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
TRAINING MEASURES								
6A	Number of people to receive other forms of education/training		Indonesia	20			20	1,130
6B	Number of training weeks to be provided		Indonesia	0.14			0.14	26.14
7	Number of (i.e., different types - not volume - of material produced) training materials to be produced for use by host country		Indonesia	0			0	25
RESEARCH MEASURES								
9	Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country		Indonesia	5			5	7
11B	Number of papers to be submitted to peer reviewed journals		Indonesia	0			0	4
12A	Number of computer based databases to be established and handed over to the host country		Indonesia	0			0	1
DISSEMINATION MEASURES								
14A	Number of conferences/seminars/workshops to be organised to present/disseminate findings		Indonesia	1			1	4
14B	Number of conferences/seminars/workshops attended at which findings from Darwin project work will be presented/disseminated.		Indonesia	1			1	5
PHYSICAL MEASURES								
20	Estimated value (£'s) of physical assets to be		Indonesia	0			0	

	handed over to host country(ies)							
21	Number of permanent educational/training/research facilities, structures, or organisations to be established and then continued after Darwin funding has ceased		Indonesia	0			0	0
22	Number of permanent field plots and sites to be established during the project and continued after Darwin funding has ceased		Indonesia	0			0	0
FINANCIAL MEASURES								
23	Value of resources raised from other sources (i.e., in addition to Darwin funding) for project work		Indonesia (village authority support to <i>Panglima Laot</i>)					
23	Value of resources raised from other sources (i.e., in addition to Darwin funding) for project work		UK (Arcadia Foundation co-finance)					

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Story of Fisherman Compressor, Simeulue-Aceh	Video	Indra, 2019	Male	Indonesian	FFI Aceh Programme	https://www.youtube.com/watch?v=A54c9M5Lapk&t=903s
Breathing space for a marine world under pressure	Online article	Henry Duffy 2019	Male	British	FFI Cambridge	https://www.fauna-flora.org/news/breathing-space-marine-world-pressure
Time to Catch Your Breath	Online technical report	Indra & Rakhm at Dirgantara, 2019	Male	Indonesian	FFI Aceh Programme	https://cms.fauna-flora.org/wp-content/uploads/2019/11/FFI_2019_Time-to-catch-your-breath-3.pdf

Annex 4 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

List of Appendixes

- 1. *Appendix 1. Supporting Document for PISISI MPA Designation***
- 2. *Appendix 2. DF Taskforce Decree***
- 3. *Appendix 3. KAP Survey Report***
- 4. *Appendix 4. LMMA Management Committee.***
- 5. *Appendix 5. PRA Report***
- 6. *Appendix. 6 Map of boundary demarcation of LMMA for 5 villages***
- 7. *Appendix 7. Management Planning***
- 8. *Appendix 8. MoM of Routine Patrol Training***
- 9. *Appendix 9. Patrol Report Year-1***
- 10. *Appendix 10. Panglima Laot Crime Report for compressor fishing***
- 11. *Appendix 11. Market literacy survey in 5 villages***
- 12. *Appendix 12. Participatory Market Mapping and Action Planning Workshop***
- 13. *Appendix 13. Resilience survey report***
- 14. *Appendix 14. SPAGs Survey Report***
- 15. *Appendix 15 – Stakeholder Analysis***
- 16. *Appendix 16. Draft of Aceh MPA Designation***
- 17. *Appendix 17. News event LMMA Networks***
- 18. *Appendix 18. Agreement between Aceh Marine and Fisheries Agency and 7 Panglima Laot***
- 19. *Appendix 19. Draft of Governor Decree about MPA Management Body***
- 20. *Appendix 20. Villages Government fund for LMMA Management***

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	Yes
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	N/A
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	